

Anticoagulant and Fibrinolytic Therapy Using p38 MAP Kinase Inhibitors**APPLICATION DATA**

- 5 This application claims benefit to US provisional application serial no. 60/403,422 filed August 14, 2002.

TECHNICAL FIELD OF THE INVENTION

- 10 The present invention relates to methods of using p38 kinase inhibitors in the treatment of diseases related to blood coagulation and fibrinolysis.

→

BACKGROUND OF THE INVENTION

15

Activation of the coagulation system is an important manifestation of the systemic inflammatory response of the host to infection. Levi M, et. al. 1999 *N Engl J Med.*;341:586-592. Several *in vivo* models have been used to dissect the molecular mechanisms that contribute to coagulation activation by bacteria and bacterial products, including intravenous

- 20 injection of low dose lipopolysaccharide (LPS) into healthy humans. Van der Poll T et. al., 1999 *Cohen J, Marshall J, ed. The Immune Response in the Critically Ill.* Berlin: Springer-Verlag; 335-357. Tissue factor, a glycoprotein expressed on endothelial cells and monocytes upon stimulation, plays an essential role in coagulation activation induced by LPS or bacteria *in vivo*, as demonstrated by abolishment of this response by inhibitors of tissue factor. de Jonge E, et. al., 2000 *Blood* 95:1124-1129; Creasey AA, et. al. 1993 *J Clin Invest.*; Carr C, et al. 1994 *Circ Shock.* 44:126-137; Levi M, et al. 1994 *J Clin Invest.* 93:114-120. Mitogen-activated protein kinases (MAPKs), such as p38 MAPK, participate in intracellular signaling cascades that mediate inflammatory responses to infectious and noninfectious stimuli. Herlaar E, et al. 1999 *Mol Med Today* 5:439-447; Ono K, et. al. 2000 *Cell Signal* 12:1-13.
- 25 Recent *in vitro* studies have implicated one of these kinases, p38 MAPK, in the regulation of tissue factor expression on monocytes, endothelial cells, and smooth muscle cells. Chu AJ, et al. 2001 *J Surg Res.* 101:85-90. Blum S, et al. 2001 *J Biol Chem.* 276:33428-33434; Eto M, et. al. 2002 *Circulation* 105:1756-1759; Herkert O, et. al. 2002 *Circulation*;105:2030-2036.

The p38 kinase inhibitors have been discussed in the literature and have been disclosed in US Patents 6,319,921, 6,358,945, 5,716,972, US 5,686,455, US 5,656,644, US 5,593,992, US 5,593,991, US 5,663,334, US 5,670,527, US 5,559,137, 5,658,903, US 5,739,143, US 5,756,499, US 6,277,989, US 6,340,685, and US 5,716,955; and PCT applications WO 92/12154, WO 94/19350, WO 95/09853, WO 95/09851, WO 95/09847, WO 95/09852, WO 97/25048, WO 97/25047, WO 97/33883, WO 97/35856, WO 97/35855, WO 97/36587, WO 97/47618, WO 97/16442, WO 97/16441, WO 97/12876, WO 98/25619, WO 98/06715, WO 98/07425, WO 98/28292, WO 98/56377, WO 98/07966, WO 98/56377, WO 98/22109, WO 98/24782, WO 98/24780, WO 98/22457, WO 98/52558, WO 98/52559, WO 98/52941, WO 98/52937, WO 98/52940, WO 98/56788, WO 98/27098, WO 98/47892, WO 98/47899, WO 98/50356, WO 98/32733, WO 99/58523, WO 99/01452, WO 99/01131, WO 99/01130, WO 99/01136, WO 99/17776, WO 99/32121, WO 99/58502, WO 99/58523, WO 99/57101, WO 99/61426, WO 99/59960, WO 99/59959, WO 99/00357, WO 99/03837, WO 99/01441, WO 99/01449, WO 99/03484, WO 99/15164, WO 99/32110, WO 99/32111, WO 99/32463, WO 99/64400, WO 99/43680, WO 99/17204, WO 99/25717, WO 99/50238, WO 99/61437, WO 99/61440, WO 00/26209, WO 00/18738, WO 00/17175, WO 00/20402, WO 00/01688, WO 00/07980, WO 00/07991, WO 00/06563, WO 00/12074, WO 00/12497, WO 00/31072, WO 00/31063, WO 00/23072, WO 00/31065, WO 00/35911, WO 00/39116, WO 00/43384, WO 00/41698, WO 00/69848, WO 00/26209, WO 00/63204, WO 00/07985, WO 00/59904, WO 00/71535, WO 00/10563, WO 00/25791, WO 00/55152, WO 00/55139, WO 00/17204, WO 00/36096, WO 00/55120, WO 00/55153, WO 00/56738, WO 01/21591, WO 01/29041, WO 01/29042, WO 01/62731, WO 01/05744, WO 01/05745, WO 01/05746, WO 01/05749, WO 01/05751, WO 01/27315, WO 01/42189, WO 01/00208, WO 01/42241, WO 01/34605, WO 01/47897, WO 01/64676, WO 01/37837, WO 01/38312, WO 01/38313, WO 01/36403, WO 01/38314, WO 01/47921, WO 01/27089, DE 19842833, and JP 2000 86657.

For the most part, such compounds have been indicated as being useful in treating cytokine mediated diseases such as those related to inflammation. Marin et al discusses the issue of whether p38 MAPK is involved in thrombin-induced endothelial proinflammatory functions including chemokine production. *Blood*, 1 August 2001, Vol. 98 (3) 667-673. Until the

present invention however, knowledge of the role of p38 MAPK in activation of coagulation and fibrinolysis has not been available.

5

Summary of the Invention

In view of the work cited above there is a clear need for a method of treating diseases or conditions related to coagulation using small molecule inhibitors such as those which inhibit p38 MAP kinase.

10

It is therefore an object of the invention to provide a method of anticoagulant and fibrinolytic therapy using inhibitors of p38 MAP kinase either for prevention or for treatment of these hematological physiologic processes in disease states where their activation may cause harm.

15

Detailed Description of the Preferred Embodiments

Surprisingly, it has been found that p38 MAPK inhibitors possess inhibitory effects on the procoagulant and profibrinolytic responses during human endotoxemia. The invention 20 therefore provides for a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of a p38 MAP kinase inhibitor. This administration may be of benefit given either prophylactically to patients at risk or therapeutically for patients who have developed complications related to these pathways.

25

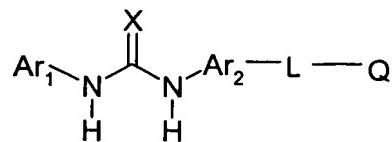
The p38 kinase inhibitors within the scope of the present invention are compounds chosen from those disclosed in US Patents 6,319,921, 6,358,945, 5,716,972, US 5,686,455, US 5,656,644, US 5,593,992, US 5,593,991, US 5,663,334, US 5,670,527, US 5,559,137, 30 5,658,903, US 5,739,143, US 5,756,499, US 6,277,989, US 6,340,685, and US 5,716,955; and PCT applications WO 92/12154, WO 94/19350, WO 95/09853, WO 95/09851, WO 95/09847, WO 95/09852, WO 97/25048, WO 97/25047, WO 97/33883, WO 97/35856, WO 97/35855, WO 97/36587, WO 97/47618, WO 97/16442, WO 97/16441, WO 97/12876, WO

98/25619, WO 98/06715, WO 98/07425, WO 98/28292, WO 98/56377, WO 98/07966, WO 98/56377, WO 98/22109, WO 98/24782, WO 98/24780, WO 98/22457, WO 98/52558, WO 98/52559, WO 98/52941, WO 98/52937, WO 98/52940, WO 98/56788, WO 98/27098, WO 98/47892, WO 98/47899, WO 98/50356, WO 98/32733, WO 99/58523, WO 99/01452, WO 5 99/01131, WO 99/01130, WO 99/01136, WO 99/17776, WO 99/32121, WO 99/58502, WO 99/58523, WO 99/57101, WO 99/61426, WO 99/59960, WO 99/59959, WO 99/00357, WO 99/03837, WO 99/01441, WO 99/01449, WO 99/03484, WO 99/15164, WO 99/32110, WO 99/32111, WO 99/32463, WO 99/64400, WO 99/43680, WO 99/17204, WO 99/25717, WO 99/50238, WO 99/61437, WO 99/61440, WO 00/26209, WO 00/18738, WO 00/17175, WO 10 00/20402, WO 00/01688, WO 00/07980, WO 00/07991, WO 00/06563, WO 00/12074, WO 00/12497, WO 00/31072, WO 00/31063, WO 00/23072, WO 00/31065, WO 00/35911, WO 00/39116, WO 00/43384, WO 00/41698, WO 00/69848, WO 00/26209, WO 00/63204, WO 00/07985, WO 00/59904, WO 00/71535, WO 00/10563, WO 00/25791, WO 00/55152, WO 00/55139, WO 00/17204, WO 00/36096, WO 00/55120, WO 00/55153, WO 00/56738, WO 15 01/21591, WO 01/29041, WO 01/29042, WO 01/62731, WO 01/05744, WO 01/05745, WO 01/05746, WO 01/05749, WO 01/05751, WO 01/27315, WO 01/42189, WO 01/00208, WO 01/42241, WO 01/34605, WO 01/47897, WO 01/64676, WO 01/37837, WO 01/38312, WO 01/38313, WO 01/36403, WO 01/38314, WO 01/47921, WO 01/27089, DE 19842833, and JP 2000 86657 whose disclosures are all incorporated herein by reference in their entirety.

20

Of particular interest are those p38 inhibitors disclosed in 6,319,921, 6,358,945, US 6,277,989, US 6,340,685, WO 00/12074, WO 00/12497, WO 00/59904, WO 00/71535, WO 01/64676, WO 99/61426, WO 00/10563, WO 00/25791, WO 01/37837, WO 01/38312, WO 01/38313, WO 01/38314, WO 01/47921, WO 99/61437, WO 99/61440, WO 00/17175, WO 25 00/17204, WO 00/36096, WO 98/27098, WO 99/00357, WO 99/58502, WO 99/64400, WO 99/01131, WO 00/43384, WO 00/55152, WO 00/55139 and WO 01/36403.

In a preferred embodiment the invention provides a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of a p38 MAP kinase inhibitor chosen from the compounds of formula disclosed in WO 00/43384 and corresponding US patent 6,319,921:



wherein

- Ar₁ is a heterocyclic group selected from the group consisting of pyrrole, pyrrolidine,
5 pyrazole, imidazole, oxazole, thiazole, furan and thiophene;
and wherein Ar₁ may be substituted by one or more R₁,R₂ or R₃;
- Ar₂ is phenyl, naphthyl, quinoline, isoquinoline, tetrahydronaphthyl, tetrahydroquinoline,
10 tetrahydroisoquinoline, benzimidazole, benzofuran, indanyl, indenyl or indole each
being optionally substituted with one to three R₂ groups;
- L, a linking group, is a
C₁₋₁₀ saturated or unsaturated branched or unbranched carbon chain;
wherein one or more methylene groups are optionally independently replaced by O,N
15 or S; and
wherein said linking group is optionally substituted with 0-2 oxo groups and one or
more C₁₋₄ branched or unbranched alkyl which may be substituted by one or more
halogen atoms;
- 20 Q is selected from the group consisting of:
 - a) phenyl, naphthyl, pyridine, pyrimidine, pyridazine, imidazole, benzimidazole,
furan, thiophene, pyran, naphthyridine, oxazo[4,5-*b*]pyridine and imidazo[4,5-*b*]pyridine, which are optionally substituted with one to three groups selected from
the group consisting of halogen,
25 C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, mono- or di-(C₁₋₃ alkyl)amino,
C₁₋₆ alkyl-S(O)_m and phenylamino wherein the phenyl ring is optionally
substituted with one to two groups consisting of halogen, C₁₋₆ alkyl and C₁₋₆
alkoxy;
 - b) tetrahydropyran, tetrahydrofuran, 1,3-dioxolanone, 1,3-dioxanone, 1,4-dioxane,
morpholine, thiomorpholine, thiomorpholine sulfoxide, thiomorpholine sulfone,
piperidine, piperidinone, tetrahydropyrimidone, cyclohexanone, cyclohexanol,
pentamethylene sulfide, pentamethylene sulfoxide, pentamethylene sulfone,
30 tetramethylene sulfide, tetramethylene sulfoxide and tetramethylene sulfone which
are optionally substituted with one to three groups selected from the group

- consisting of C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, mono- or di-(C₁₋₃ alkyl)amino-C₁₋₃ alkyl, phenylamino-C₁₋₃ alkyl and C₁₋₃ alkoxy-C₁₋₃ alkyl;
- 5 c) C₁₋₆ alkoxy, secondary or tertiary amine wherein the amino nitrogen is covalently bonded to groups selected from the group consisting of C₁₋₃ alkyl, C₁₋₅ alkoxyalkyl and phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_r, phenyl-S(O)_t, wherein the phenyl ring is optionally substituted with one to two groups consisting of halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino;
- 10 R₁ is selected from the group consisting of:
- 15 (a) C₃₋₁₀ branched or unbranched alkyl, which may optionally be partially or fully halogenated, and optionally substituted with one to three phenyl, naphthyl or heterocyclic groups selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl; each such phenyl, naphthyl or heterocycle selected from the group hereinabove described, being substituted with 0 to 5 groups selected from the group consisting of halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, C₃₋₈ cycloalkyl, C₅₋₈ cycloalkenyl, hydroxy, cyano, C₁₋₃ alkyloxy which is optionally partially or fully halogenated, NH₂C(O) and di(C₁₋₃)alkylaminocarbonyl;
- 20 (b) C₃₋₇ cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl and bicycloheptanyl, which may optionally be partially or fully halogenated and which may optionally be substituted with one to three C₁₋₃ alkyl groups, or an analog of such cycloalkyl group wherein one to three ring methylene groups are replaced by groups independently selected from O, S, CHOH, >C=O, >C=S and NH;
- 25 (c) C₃₋₁₀ branched alkenyl which may optionally be partially or fully halogenated, and which is optionally substituted with one to three C₁₋₅ branched or unbranched alkyl, phenyl, naphthyl or heterocyclic groups, with each such heterocyclic group being independently selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl, and each such phenyl, naphthyl or heterocyclic group being substituted with 0 to 5 groups selected from halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl and
- 30 35

- bicycloheptanyl, hydroxy, cyano, C₁₋₃ alkyloxy which is optionally partially or fully halogenated, NH₂C(O), mono- or di(C₁₋₃)alkylaminocarbonyl;
- (d) C₅₋₇ cycloalkenyl selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl and bicycloheptenyl, wherein such cycloalkenyl group may optionally be substituted with one to three C₁₋₃ alkyl groups;
- (e) cyano; and,
- (f) methoxycarbonyl, ethoxycarbonyl and propoxycarbonyl;
- 10 R₂ is selected from the group consisting of:
a C₁₋₆ branched or unbranched alkyl which may optionally be partially or fully halogenated, acetyl, aroyl, C₁₋₄ branched or unbranched alkoxy, which may optionally be partially or fully halogenated, halogen, methoxycarbonyl and phenylsulfonyl;
- 15 R₃ is selected from the group consisting of:
a) a phenyl, naphthyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, tetrahydrofuryl, isoxazolyl, isothiazolyl, quinolinyl, isoquinolinyl, indolyl, benzimidazolyl, benzofuranyl, benzoxazolyl, benzisoxazolyl, benzopyrazolyl, benzothiofuranyl, cinnolinyl, pterindinyl, phthalazinyl, naphthypyridinyl, quinoxalinyl, quinazolinyl, purinyl and indazolyl; wherein such phenyl, naphthyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of a C₁₋₆ branched or unbranched alkyl, phenyl, naphthyl, heterocycle selected from the group hereinabove described, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl, bicycloheptanyl, phenyl C₁₋₅ alkyl, naphthyl C₁₋₅ alkyl, halo, hydroxy, cyano, C₁₋₃ alkyloxy which may optionally be partially or fully halogenated, phenoxy, naphthoxy, heteraryloxy wherein the heterocyclic moiety is selected from the group hereinabove described, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclylamino wherein the heterocyclyl moiety is selected from the group hereinabove described, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, amino-S(O)₂, di-(C₁₋₃)alkylamino-S(O)₂, R₄-C₁₋₅ alkyl, R₅-C₁₋₅ alkoxy, R₆-C(O)-C₁₋₅ alkyl and R₇-C₁₋₅ alkyl(R₈)N;

- b) a fused aryl selected from the group consisting of benzocyclobutanyl, indanyl, indenyl, dihydronaphthyl, tetrahydronaphthyl, benzocycloheptanyl and benzocycloheptenyl, or a fused heterocyclyl selected from the group consisting of cyclopentenopyridine, cyclohexanopyridine, cyclopentanopyrimidine, cyclohexanopyrimidine, cyclopentanopyrazine, cyclohexanopyrazine, cyclopentanopyridazine, cyclohexanopyridazine, cyclopentanoquinoline, cyclohexanoquinoline, cyclopentanoisoquinoline, cyclohexanoisoquinoline, cyclopentanoindole, cyclohexanoindole, cyclopentanobenzimidazole, cyclohexanobenzimidazole, cyclopentanobenzoxazole, cyclohexanobenzoxazole, cyclopentanoimidazole, cyclohexanoimidazole, cyclopentanothiophene and cyclohexanothiophene; wherein the fused aryl or fused heterocyclyl ring is substituted with 0 to 3 groups independently selected from phenyl, naphthyl and heterocyclyl selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl, and isothiazolyl, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, halo, cyano, C₁₋₃ alkyloxy which is optionally partially or fully halogenated, phenoxy, naphthoxy, heterocyclyloxy wherein the heterocyclyl moiety is selected from the group hereinabove described, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclylamino wherein the heterocyclyl moiety is selected from the group hereinabove described, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₄ alkyl-OC(O), C₁₋₅ alkyl-C(O)-C₁₋₄ branched or unbranched alkyl, an amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, R₉-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkoxy, R₁₁-C(O)-C₁₋₅ alkyl, and R₁₂-C₁₋₅ alkyl(R₁₃)N;
- c) cycloalkyl selected from the group consisting of cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl and bicycloheptanyl, which the cycloalkyl may optionally be partially or fully halogenated and which may optionally be substituted with one to three C₁₋₃ alkyl groups;
- d) C₅₋₇ cycloalkenyl, selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl and bicycloheptenyl, wherein such cycloalkenyl group may optionally be substituted with one to three C₁₋₃ alkyl groups; and
- e) acetyl, aroyl, alkoxycarbonylalkyl or phenylsulfonyl;
- f) C₁₋₆ branched or unbranched alkyl which may optionally be partially or fully halogenated;

or R₁ and R₂ taken together may optionally form a fused phenyl or pyridinyl ring,

and wherein each R₈, R₁₃ is independently selected from the group consisting of:

5 hydrogen and C₁₋₄ branched or unbranched alkyl which may optionally be partially or
fully halogenated;

each R₄, R₅, R₆, R₇, R₉, R₁₀, R₁₁ and R₁₂ is independently selected from the group
consisting of:

10 morpholine, piperidine, piperazine, imidazole and tetrazole;

m = 0, 1, 2;

r = 0, 1, 2;

t = 0, 1, 2;

15 X = O or S and physiologically acceptable acids or salts thereof.

In a preferred embodiment the p38 kinase inhibitor is selected from the compounds as
immediately described above and wherein Ar₂ is naphthyl, tetrahydronaphthyl, indanyl or

20 indenyl.

In a more preferred subgeneric aspect of the invention the p38 kinase inhibitor is selected
from the compounds as immediately described above and wherein Ar₂ is naphthyl.

25 A yet more preferred subgeneric aspect of the invention the p38 kinase inhibitor is selected
from the compounds as immediately described above and wherein:

Ar₁ is thiophene or pyrazole;

Ar₂ is 1-naphthyl;

L is C₁₋₆ saturated or unsaturated branched or unbranched carbon chain wherein one or

30 more methylene groups are optionally independently replaced by O, N or S; and

wherein said linking group is optionally substituted with 0-2 oxo groups and one or more C₁₋₄
branched or unbranched alkyl which may be substituted by one or more halogen
atoms;

R₁ is selected from the group consisting of C₁₋₄alkyl branched or unbranched, cyclopropyl

35 and cyclohexyl which may optionally be partially or fully halogenated and which may
optionally be substituted with one to three C₁₋₃ alkyl groups;

R₃ is selected from the group consisting of C₃₋₁₀alkyl branched or unbranched, cyclopropanyl, cyclopentanyl, phenyl, pyridinyl each being optionally substituted as described above and alkoxy carbonyl alkyl.

- 5 In a yet further preferred subgeneric aspect of the invention the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein Ar₁ is pyrazole.

A still yet further preferred subgeneric aspect of previous the invention the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein L is C₁.

- 10 5 saturated carbon chain wherein one or more methylene groups are optionally independently replaced by O, N or S; and wherein said linking group is optionally substituted with 0-2 oxo groups and one or more C₁₋₄ branched or unbranched alkyl which may be substituted by one or more halogen atoms.

- 15 Particularly preferred embodiments of L are propoxy, ethoxy, methoxy, methyl, propyl, C₃₋₅ acetylene or methylamino each being optionally substituted are described herein.

A more particularly preferred embodiment of L is ethoxy optionally substituted.

- 20 The following compounds are representative of the compounds the p38 kinase inhibitors which can be used in the methods described herein:

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

- 25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(*cis*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

- 30 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(*trans*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(methoxymethyl)morpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

- 35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-2-oxoethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-2-methylethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-1-methylethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-thiomorpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

10 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-oxothiomorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)-3-methylnaphthalen-1-yl]-urea;

15

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-piperidin-4-yl-ethoxy)naphthalen-1-yl]-urea;

20 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-acetyl)piperidin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-thiazolidin-3-yl-ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-carbonyloxo)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(tetrahydropyran-4-yl)ethoxy)naphthalen-1-yl]-urea;

30

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(N-methyl-2-methoxyethylamino)ethoxy)naphthalen-1-yl]-urea;

35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-oxo-tetrahydrothiophen-3-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-propyl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(morpholin-4-yl-methyl)naphthalen-1-yl]-
5 urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-thiazolidin-3-yl-propyl)naphthalen-1-yl]-urea;

10 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-2-yl-oxy)propyl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethyl)naphthalen-1-yl]-urea;

15 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethenyl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)propyn-1-yl)naphthalen-1-yl]-urea;

20 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-2-yl-oxy)propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(methoxymethoxy)propyn-1-yl)naphthalen-1-yl]-urea;

25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)-3-methylpropyn-1-yl)naphthalen-1-yl]-urea;

30 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)-3,3-dimethylpropyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-2-yl-oxy)butyn-1-yl)naphthalen-1-yl]-urea;

35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(furan-2-ylcarbonyloxy)propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(piperdin-1-yl)propyn-1-yl)naphthalen-1-yl]-urea;

5 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(2-methoxymethylmorpholin-4-yl)propyn-1-yl)naphthalen-1-yl]-urea;

10 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-4-yl-methoxy)naphthalen-1-yl]-urea;

15 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethoxy)naphthalen-1-yl]-urea;

20 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-imidazol-1-yl-ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-benzimidazol-1-yl-ethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-4-yl-methylamino)naphthalen-1-yl]-urea;

35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(morpholin-4-yl-acetamido)naphthalen-1-yl]-urea;

40 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-3-yl-methylamino)naphthalen-1-yl]-urea;

45 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-3-yl-carbonylamino)naphthalen-1-yl]-urea;

- 1-[5-*iso*-Propyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-(Tetrahydropyran-3-yl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-cyclohexyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 10 1-[5-(2,2,2-trifluoroethyl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-(1-methylcycloprop-1-yl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 15 1-[5-ethoxycarbonyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-(1-methylcyclohex-1-yl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 20 1-[5-*tert*-butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-butyl-2-benzyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 25 1-[5-*tert*-butyl-2-(4-chlorophenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 30 1-[5-*tert*-butyl-2-butyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-butyl-2-(ethoxycarbonylmethyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;
- 35

1-[5-*tert*-butyl-2-(4-methyl-3-carbamylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(4-methyl-3-(2-ethoxycarbonylvinyl)phenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(4-methyl-3-(morpholin-4-yl)methylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

10 1-[5-*tert*-butyl-2-(4-methyl-3-dimethylaminomethylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(3-(2-morpholin-4-yl-ethyl)phenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

15 1-[5-*tert*-butyl-2-(3-(tetrahydropyran-4-ylamino)phenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(3-dimethylaminomethylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

20 1-[5-*tert*-butyl-2-(4-(tetrahydropyran-4-ylamino)phenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-butyl-2-(4-(3-benzylureido)phenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(2-chloropyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

35 1-[5-*tert*-butyl-2-(2-methoxypyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-5 ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(*trans*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

10 1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(2-dimethylaminomethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

15 1-[5-*tert*-butyl-2-*iso*-propyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

20 1-[5-*tert*-butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(thiophen-3-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-butyl-2-cyclopentyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-*iso*-propyl-2H-pyrazol-3-yl]-3-[4-(tetrahydropyran-4-yl-ethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(1-oxo-tetrahydrothiophen-3-yl-ethoxy)naphthalen-1-yl]-urea;

35 1-[5-*tert*-butyl-2-(thiophen-3-yl)-2H-pyrazol-3-yl]-3-[4-(2-pyridinyl-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-cyclopentyl-2H-pyrazol-3-yl]-3-[4-(pyridin-4-yl-methoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(pyridin-4-yl)propyn-1-yl)naphthalen-1-yl]-
5 urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(2-methylaminopyridin-4-yl)propyn-1-
yl)naphthalen-1-yl]-urea;

10 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(1-oxo-tetrahydrotiophen-3-yl)propyn-1-
yl)naphthalen-1-yl]-urea;

15 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(thiazolidin-3-yl)propyn-1-yl)naphthalen-1-
yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-4-yl)propyn-1-
yl)naphthalen-1-yl]-urea;

20 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-methylaminopyrimidin-4-yl-
methoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(2-methylaminopyrimidin-4-
yl)ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(4-methoxybenzimidazol-1-
yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(4-methylaminobenzimidazol-1-
yl)ethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(2-imidazo[4,5-b]pyridin-1-
yl)ethoxy)naphthalen-1-yl]-urea;

35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-[1,8]naphthyridin-4-yl)ethoxy)naphthalen-
1-yl]-urea;

- 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(3,4-dihydro-2H-pyrano[2,3-*b*]pyridin-5-yl)ethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-Butyl-2-pyridin-3-yl-2H-pyrazol-3-yl]-3-[4-(2-methylaminopyrimidin-4-ylmethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-Butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(2-methylaminopyrimidin-4-yl)ethoxy)naphthalen-1-yl]-urea;
- 10 1-[5-*tert*-Butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(4-methoxybenzimidazol-1-yl)ethoxy)naphthalen-1-yl]-urea;
- 15 1-[5-*tert*-Butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(4-methylaminobenzimidazol-1-yl)ethoxy)naphthalen-1-yl]-urea;
- 20 1-[5-*tert*-Butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-[1,8]naphthyridin-4-yl)ethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-Butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(3,4-dihydro-2H-pyrano[2,3-*b*]pyridin-5-yl)ethoxy)naphthalen-1-yl]-urea;
- 25 1-[5-*tert*-Butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(2-methylaminopyrimidin-4-ylmethoxy)naphthalen-1-yl]-urea;
- 1-[5-*tert*-Butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(2-(2-methylaminopyrimidin-4-yl)ethoxy)naphthalen-1-yl]-urea;
- 30 1-[5-*tert*-Butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(2-(4-methoxybenzimidazol-1-yl)ethoxy)naphthalen-1-yl]-urea;
- 35 1-[5-*tert*-Butyl-2-cyclopropyl-2H-pyrazol-3-yl]-3-[4-(2-(4-methylaminobenzimidazol-1-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(2-(2-imidazo[4,5-b]pyridin-1-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(2-[1,8]naphthyridin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(2-(3,4-dihydro-2H-pyrano[2,3-b]pyridin-5-yl)ethoxy)naphthalen-1-yl]-urea

and their physiologically acceptable acids or salts thereof.

The following compounds are preferred p38 kinase inhibitors which can be used in the methods described herein:

15 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(*cis*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

20

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(*trans*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(methoxymethyl)morpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-2-oxoethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-2-methylethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl)-1-methylethoxy)naphthalen-1-yl]-urea;

35

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-thiomorpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-oxothiomorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

- 5 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)-3-methylnaphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-carbonyloxo)ethoxy)naphthalen-1-yl]-urea;

10

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(tetrahydropyran-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-oxo-tetrahydrothiophen-3-

- 15 yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-propyl)naphthalen-1-yl]-urea;

- 20 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(morpholin-4-yl-methyl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethyl)naphthalen-1-yl]-urea;

- 25 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-2-yl-oxy)propyn-1-yl)naphthalen-1-yl]-urea;

30

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(tetrahydropyran-2-yl-oxy)butyn-1-yl)naphthalen-1-yl]-urea;

- 35 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(piperdin-1-yl)propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(2-methoxymethylmorpholin-4-yl)propyn-1-yl)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-4-yl-methoxy)naphthalen-1-yl]-urea;

5

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-pyridin-4-yl-propoxy)naphthalen-1-yl]-urea;

10

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-imidazol-1-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(3,4-dimethoxyphenyl)-ethoxy)naphthalen-1-yl]-urea;

15

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(pyridin-4-yl-methylamino)naphthalen-1-yl]-urea;

20 1-[5-*iso*-Propyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-cyclohexyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

25

1-[5-(2,2,2-trifluoroethyl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

30

1-[5-(1-methylcycloprop-1-yl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-(1-methylcyclohex-1-yl)-2-phenyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

35

1-[5-*tert*-butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(4-chlorophenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-butyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-
5 urea;

1-[5-*tert*-butyl-2-(4-methyl-3-carbamylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

10 1-[5-*tert*-butyl-2-(4-methyl-3-(morpholin-4-yl)methylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(4-methyl-3-dimethylaminomethylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

15 1-[5-*tert*-butyl-2-(3-dimethylaminomethylphenyl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

20 1-[5-*tert*-butyl-2-(2-chloropyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

25 1-[5-*tert*-butyl-2-(2-methoxypyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

30 1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethoxy)naphthalen-1-yl]-urea;

35 1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(*trans*-2,6-dimethylmorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-propyn-1-yl)naphthalen-1-yl]-urea.

Particularly preferred p38 kinase inhibitors within the scope of the present invention are the following compounds:

1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea;

10 1-[5-*tert*-Butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(1-oxothiomorpholin-4-yl)ethoxy)naphthalen-1-yl]-urea;

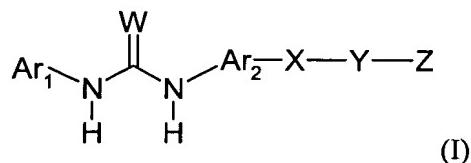
1-[5-*tert*-butyl-2-(2-methylpyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-pyridin-4-yl-ethoxy)naphthalen-1-yl]-urea;

15

1-[5-*tert*-butyl-2-(2-methoxypyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-ylethoxy)naphthalen-1-yl]-urea or

1-[5-
20 urea.

In another preferred embodiment the invention provides a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of a p38 MAP kinase inhibitor chosen from the compounds of formula disclosed in WO 00/55139 and corresponding US patent no. 6,358,945:



wherein:

30

Ar₁ is selected from the group consisting of:

pyrrole, pyrrolidine, pyrazole, imidazole, oxazole, thiazole, furan and thiophene:

wherein Ar₁ may be substituted by one or more R₁, R₂ or R₃:

35

Ar₂ is:

phenyl, naphthyl, quinoline, isoquinoline, tetrahydronaphthyl, tetrahydroquinoline, tetrahydroisoquinoline, benzimidazole, benzofuran, indanyl, indenyl or indole each being optionally substituted with zero to three R₂ groups;

5

X is:

- a) a C₅₋₈ cycloalkyl or cycloalkenyl optionally substituted with 0-2 oxo groups or 0-3 C₁₋₄ branched or unbranched alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino chains;
- b) phenyl, furan, thiophene, pyrrole, imidazolyl, pyridine, pyrimidine, pyridinone, dihydropyridinone, maleimide, dihydromaleimide, piperidine, piperazine or pyrazine each being optionally independently substituted with 0-3 C₁₋₄ branched or unbranched alkyl, C₁₋₄ alkoxy, hydroxy, nitrile, mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m, or halogen;

10

Y is:

a bond or a C₁₋₄ saturated or unsaturated branched or unbranched carbon chain optionally partially or fully halogenated, wherein one or more methylene groups are optionally replaced by O, NH, S(O), S(O)₂ or S and wherein Y is optionally independently substituted with 0-2 oxo groups and one or more C₁₋₄ branched or unbranched alkyl which may be substituted by one or more halogen atoms;

20

Z is:

- a) phenyl, pyridine, pyrimidine, pyridazine, imidazole, furan, thiophene, pyran, which are optionally substituted with one to three groups consisting of halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m, COOH and phenylamino wherein the phenyl ring is optionally substituted with one to two groups consisting of halogen, C₁₋₆ alkyl and C₁₋₆ alkoxy;
- b) tetrahydropyran, tetrahydrofuran, 1,3-dioxolanone, 1,3-dioxanone, 1,4-dioxane, morpholine, thiomorpholine, thiomorpholine sulfoxide, piperidine, piperidinone, piperazine, tetrahydropyrimidone, cyclohexanone, cyclohexanol, pentamethylene sulfide, pentamethylene sulfoxide, pentamethylene sulfone, tetramethylene sulfide, tetramethylene sulfoxide or tetramethylene sulfone which are optionally substituted with one to three groups consisting of nitrile, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, mono- or di-(C₁₋₃ alkyl)amino-C₁₋₃ alkyl, phenylamino-C₁₋₃ alkyl and C₁₋₃ alkoxy-C₁₋₃ alkyl;
- c) C₁₋₆ alkoxy, secondary or tertiary amine wherein the amino nitrogen is covalently bonded to groups selected from the group consisting of C₁₋₃ alkyl, C₁₋₅

alkoxyalkyl, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl, tetrahydrofuranyl-C₁₋₃ alkyl, phenylamino, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m, and phenyl-S(O)_m, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino;

5 R₁ is :

- a) C₃₋₁₀ branched or unbranched alkyl optionally partially or fully halogenated and optionally substituted with one to three phenyl, naphthyl or heterocyclic groups selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl; each such phenyl, naphthyl or heterocycle selected from the group hereinabove described in this paragraph, and being substituted with 0 to 5 groups selected from the group consisting of halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, C₃₋₈ cycloalkyl, C₅₋₈ cycloalkenyl, hydroxy, nitrile, C₁₋₃ alkyloxy which is optionally partially or fully halogenated, NH₂C(O) and di(C₁₋₃)alkylaminocarbonyl;
- b) C₃₋₇ cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl and bicycloheptanyl each being optionally be partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups, or an analog of such cycloalkyl group wherein one to three ring methylene groups are replaced by groups independently selected from the group consisting of O, S, CHOH, >C=O, >C=S and NH;
- c) C₃₋₁₀ branched alkenyl optionally partially or fully halogenated and optionally substituted with one to three C₁₋₅ branched or unbranched alkyl, phenyl, naphthyl or heterocyclic groups, with each such heterocyclic group being independently selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl, and each such phenyl, naphthyl or heterocyclic group being substituted with 0 to 5 groups selected from the group consisting of halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl, bicycloheptanyl, hydroxy, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated, NH₂C(O) and mono- or di(C₁₋₃)alkylaminocarbonyl;

- d) a C₅₋₇ cycloalkenyl selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl and bicycloheptenyl, wherein such cycloalkenyl group is optionally substituted with one to three C₁₋₃ alkyl groups;
- 5 e) nitrile; or
- f) C₁₋₆ branched or unbranched alkoxycarbonyl, C₁₋₆ branched or unbranched alkylaminocarbonyl, C₁₋₆ branched or unbranched alkylcarbonylamino-C₁₋₃-alkyl;

R₂ is:

10 a C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated, acetyl, aroyl, C₁₋₄ branched or unbranched alkoxy optionally partially or fully halogenated, halogen, methoxycarbonyl or phenylsulfonyl;

R₃ is:

15 a) phenyl, naphthyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, tetrahydrofuryl, isoxazolyl, isothiazolyl, quinolinyl, isoquinolinyl, indolyl, benzimidazolyl, benzofuranyl, benzoxazolyl, benzisoxazolyl, benzpyrazolyl, benzothifuranyl, cinnolinyl, pterindinyl, phthalazinyl, naphthypyridinyl, quinoxalinyl, quinazolinyl, purinyl and indazolyl, wherein such phenyl, naphthyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of phenyl, naphthyl, heterocycle selected from the group hereinabove described in this paragraph, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl, bicycloheptyl, phenyl C₁₋₅ alkyl, naphthyl C₁₋₅ alkyl, halogen, hydroxy, nitrile, C₁₋₃ alkyloxy which may optionally be partially or fully halogenated, phenoxy, naphthoxy, heteraryloxy wherein the heterocyclic moiety is selected from the group hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclamino wherein the heterocyclyl moiety is selected from the group hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, amino-S(O)₂, di-(C₁₋₃)alkylamino-S(O)₂, R₄-C₁₋₅ alkyl, R₅-C₁₋₅ alkoxy, R₆-C(O)-C₁₋₅ alkyl and R₇-C₁₋₅ alkyl(R₈)N, carboxy-mono- or di-(C₁₋₅)-alkyl-amino;

20 b) a fused aryl selected from the group consisting of benzocyclobutanyl, indanyl, indenyl, dihydronaphthyl, tetrahydronaphthyl, benzocycloheptanyl and

25

30

35

benzocycloheptenyl, or a fused heterocyclyl selected from the group consisting of cyclopentenopyridine, cyclohexanopyridine, cyclopantanopyrimidine, cyclohexanopyrimidine, cyclopantanopyrazine, cyclohexanopyrazine, cyclopantanopyridazine, cyclohexanopyridazine, cyclopentanoquinoline, cyclohexanoquinoline, cyclopentanoisoquinoline, cyclohexanoisoquinoline, cyclopentanoindole, cyclohexanoindole, cyclopentanobenzimidazole, cyclohexanobenzimidazole, cyclopantanobenzoxazole, cyclohexanobenzoxazole, cyclopentanoimidazole, cyclohexanoimidazole, cyclopentanothiophene and cyclohexanothiophene; wherein the fused aryl or fused heterocyclyl ring is substituted with 0 to 3 groups independently selected from the group consisting of phenyl, naphthyl and heterocyclyl selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl, and isothiazolyl, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, halogen, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated, phenoxy, naphthoxy, heterocyclyoxy wherein the heterocyclyl moiety is selected from the group hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclylamino wherein the heterocyclyl moiety is selected from the group hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₄ alkyl-OC(O), C₁₋₅ alkyl-C(O)-C₁₋₄ branched or unbranched alkyl, an amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, R₉-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkoxy, R₁₁-C(O)-C₁₋₅ alkyl, and R₁₂-C₁₋₅ alkyl(R₁₃)N;

c) cycloalkyl selected from the group consisting of cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl and bicycloheptyl, wherein the cycloalkyl is optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups;

d) C₅₋₇ cycloalkenyl selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl and bicycloheptenyl, wherein such cycloalkenyl group is optionally substituted with one to three C₁₋₃ alkyl groups;

e) acetyl, aroyl, alkoxycarbonylalkyl or phenylsulfonyl; or

f) C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated;

or R₁ and R₂ taken together may optionally form a fused phenyl or pyridinyl ring;

35

each R₈ and R₁₃ is independently selected from the group consisting of:

hydrogen and C₁₋₄ branched or unbranched alkyl optionally be partially or fully halogenated;

5 each R₄, R₅, R₆, R₇, R₉, R₁₀, R₁₁ and R₁₂ is independently selected from the group consisting of morpholine, piperidine, piperazine, imidazole and tetrazole;

m is 0, 1 or 2;

W is O or S and pharmaceutically acceptable derivatives thereof.

10

In a preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

Ar₂ is naphthyl, tetrahydronaphthyl, indanyl or indenyl and
W is O.

15

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

Ar₁ is selected from thiophene and pyrazole;

X is C₅₋₇ cycloalkyl or C₅₋₇cycloalkenyl optionally substituted with 0-2 oxo groups or 0-3
20 C₁₋₄ branched or unbranched alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino; or

X is phenyl, pyridine, tetrahydropyridine, pyrimidine, furan or thiophene each being optionally independently substituted with 0-3 C₁₋₄ branched or unbranched alkyl, C₁₋₄alkoxy, hydroxy, nitrile, mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m or halogen;

R₁ is C₁₋₄alkyl branched or unbranched, cyclopropyl or cyclohexyl optionally partially or
25 fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups;

R₃ is C₁₋₄alkyl branched or unbranched, phenyl, pyrimidinyl, pyrazolyl or pyridinyl each being optionally substituted as described hereinabove in the broadest generic aspect, alkoxycarbonylalkyl or cyclopropyl or cyclopentyl optionally substituted as described hereinabove in the broadest generic aspect.

30

In yet another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

Ar₁ is pyrazole;

X is cyclopentenyl, cyclohexenyl or cycloheptenyl, optionally substituted with an oxo
35 group or 0-3 C₁₋₄ branched or unbranched alkyl, C₁₋₄alkoxy or

C_{1-4} alkylamino; or X is phenyl, pyridine, furan or thiophene each being optionally independently substituted with 0-3 C_{1-4} branched or unbranched alkyl, C_{1-4} alkoxy, hydroxy, nitrile, mono- or di-(C_{1-3} alkyl)amino, C_{1-6} alkyl-S(O)_m or halogen.

- 5 In yet still another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:
- Y is -CH₂-, -CH₂CH₂-, -CH₂NH-, -CH₂CH₂NH- or a bond;
and
- 10 Z is phenyl, imidazole, furan, piperazine, tetrahydropyran, morpholine, thiomorpholine, thiomorpholine sulfoxide, piperidine, pyridine, secondary or tertiary amine wherein the amino nitrogen is covalently bonded to groups selected from the group consisting of C_{1-3} alkyl and C_{1-5} alkoxyalkyl, phenylamino wherein the phenyl ring is optionally substituted with one to two halogen, C_{1-6} alkoxy, hydroxy or mono- or di-(C_{1-3} alkyl)amino, C_{1-6} alkyl-S(O)_m and phenyl-S(O)_m wherein the phenyl ring is optionally substituted with one to two halogen, C_{1-6} alkoxy, hydroxy or mono- or di-(C_{1-3} alkyl)amino.

In a further embodiment the p38 kinase inhibitor is selected from the compounds as

- 20 immediately described above and wherein:
- Ar₁ is 5-*tert*-butyl-pyrazol-3-yl; wherein the pyrazole ring may be substituted by R₃;
R₃ is C_{1-4} alkyl branched or unbranched, phenyl, pyrimidinyl, pyrazolyl, pyridinyl each being optionally substituted as described hereinabove in the broadest generic aspect, alkoxy carbonylalkyl or cyclopropyl or cyclopentyl optionally substituted as described hereinabove in the broadest generic aspect.
- 25

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein

X is pyridinyl.

- 30 In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein
the pyridinyl is attached to Ar₁ via the 3-pyridinyl position.

- 35 The following compounds are representative of the compounds the p38 kinase inhibitors which can be used in the methods described herein:

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-methyl)phenyl)naphthalen-5-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(2-(morpholin-4-yl)ethyl)phenyl)naphthalen-1-yl]urea;

10 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-dimethylaminophenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)phenyl)naphthalen-1-yl]urea;

15 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

20

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(5-morpholin-4-ylmethyl-pyridin-2-yl)naphthalen-1-yl]urea;

25 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(5-morpholin-4-ylmethyl-fur-2-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

30 1-[5-*tert*-butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(4-piperdin-1-ylmethyl-phenyl)naphthalen-1-yl]urea;

35

1-[5-*tert*-butyl-2-phenyl-2H-pyrazol-3-yl]-3-[4-(4-(4-methylpiperazin-1-yl)methylphenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3,4-di(morpholin-4-ylmethyl)phenyl)naphthalen-1-yl]urea;

- 5 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-pyridin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-ylmethyl)pyridin-3-yl)naphthalen-1-yl]urea;

10

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-ylmethyl)pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-tetrahydropyran-4-

- 15 ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-tetrahydrothiophen-3-ylmethyl)pyridin-3-yl)naphthalen-1-yl]urea;

- 20 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(imidazol-1-ylmethyl)pyridin-3-yl)naphthalen-1-yl]urea;

1-[2-(3-dimethylaminomethylphenyl)-5-(1-methyl-cyclohexyl)-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

25

1-[2-(5-(1-methyl-cyclohexyl)-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-

- 30 yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-methoxy-5-(2-morpholin-4-yl-ethoxy)phenyl)naphthalen-1-yl]urea;

- 35 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-morpholin-4-yl-ethoxy)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-3-(dimethylamino)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-3-(methylsulfonyl)phenyl)naphthalen-1-yl]urea;

5-*tert*-butyl-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]ureido}thiophene-2-carboxylic acid methyl ester;

10 5-*tert*-butyl-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]ureido}thiophene-2-carboxylic acid methylamide;

5-*tert*-butyl-1-methyl-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]ureido}-1H-pyrrole-2-carboxylic acid methyl ester;

15 5-*tert*-butyl-1-methyl-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]ureido}-1H-pyrrole-2-carboxylic acid methylamide;

20 2-acetylamino N-(5-*tert*-butyl-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]ureido}thiophen-2-ylmethyl)acetamide;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-cyclohex-1-enyl)naphthalen-1-yl]urea;

25 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-cyclohept-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(2-morpholin-4-yl-ethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

30 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-morpholin-4-yl-cyclohept-1-enyl)naphthalen-1-yl]urea;

35 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(pyridin-4-yl-methylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(dimethylaminoethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(pyridin-3-ylmethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(phenylmethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

10 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-phenylethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(furan-2-ylmethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

15 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-pyridin-2-ylethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

20 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-piperdin-1-ylethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-imidazol-4-ylethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

25 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(pyridin-2-ylmethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-(4-methoxyphenyl)ethylamino)cyclohex-1-enyl)naphthalen-1-yl]urea;

30 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-morpholin-4-ylmethyl-3-oxo-cyclohex-1-enyl)naphthalen-1-yl]urea;

35 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(1-oxo-tetrahydrothiophen-3-ylmethyl)-3-oxo-cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(1-oxo-thiomorpholin-4-ylmethyl)-3-oxo-cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-methylpiperazin-1-ylmethyl)-3-oxo-5 cyclohex-1-enyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-{6-oxo-1-(tetrahydro-pyran-4-ylmethyl)-1,2,3,6-tetrahydro-pyridin-4-yl}naphthalen-1-yl]urea;

10 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(2-oxo-1-pyridin-4-ylmethyl-piperdin-4-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(6-oxo-1-pyridin-4-yl-1,2,3,6-tetrahydro-pyridin-4-yl)naphthalen-1-yl]urea;

15 1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-oxo-1-pyridin-4-yl-1,2,3,6-tetrahydro-pyridin-4-yl)naphthalen-1-yl]urea;

5-*tert*-butyl-3-{3-[4-(6-oxo-1-pyridin-4-yl-1,2,3,6-tetrahydro-pyridin-4-yl)naphthalen-1-

20 yl]ureido}thiophene-2-carboxylic acid methyl ester;

5-*tert*-butyl-1-methyl-3-{3-[4-(6-oxo-1-pyridin-4-yl-1,2,3,6-tetrahydro-pyridin-4-yl)naphthalen-1-yl]ureido}pyrrole-2-carboxylic acid methyl ester;

25 5-*tert*-butyl-1-methyl-3-{3-[4-(6-oxo-1-pyridin-4-yl-1,2,3,6-tetrahydro-pyridin-4-yl)naphthalen-1-yl]ureido}pyrrole-2-carboxylic acid methyl amide;

5-*tert*-butyl-3-{3-[4-(3-morpholin-4-yl-cyclohex-1-enyl)naphthalen-1-yl]ureido}thiophene-2-carboxylic acid methyl ester;

30 5-*tert*-butyl-1-methyl-3-{3-[4-(3-morpholin-4-yl-cyclohex-1-enyl)naphthalen-1-yl]ureido}pyrrole-2-carboxylic acid methyl ester; and

5-*tert*-butyl-1-methyl-3-{3-[4-(3-morpholin-4-yl-cyclohex-1-enyl)naphthalen-1-

35 yl]ureido}pyrrole-2-carboxylic acid methyl amide and

the pharmaceutically acceptable derivatives thereof.

The following compounds are preferred compounds of the p38 kinase inhibitors which can be used in the methods described herein:

5

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(2-(morpholin-4-

10 yl)ethyl)phenyl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]urea;

15 1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(5-morpholin-4-ylmethyl-pyridin-2-yl)naphthalen-1-yl]urea;

20

1-[5-*tert*-butyl-2-*p*-tolyl-2H-pyrazol-3-yl]-3-[4-(5-morpholin-4-ylmethyl-fur-2-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-

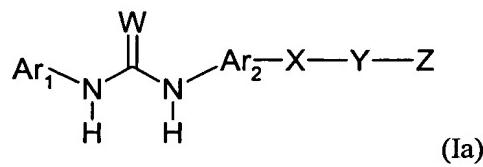
25 pyridin-3-yl)naphthalen-1-yl]urea;

1-[5-*tert*-butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)naphthalen-1-yl]urea and

30 the pharmaceutically acceptable derivatives thereof.

In another preferred embodiment the invention provides a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of

35 a p38 MAP kinase inhibitor chosen from the compounds of formula disclosed in WO 00/55139 and corresponding US patent no. 6,358,945:



wherein:

5

Ar_1 is:

pyrrole, pyrrolidine, pyrazole, imidazole, oxazole, thiazole, furan and thiophene;

10

Ar_2 is:

phenyl, naphthyl, quinoline, isoquinoline, tetrahydronaphthyl, tetrahydroquinoline, tetrahydroisoquinoline, benzimidazole, benzofuran, indanyl, indenyl and indole each being optionally substituted with zero to three R_2 groups;

15

X is:

a C_{5-8} cycloalkyl or cycloalkenyl optionally substituted with one to two oxo groups or one to three C_{1-4} alkyl, C_{1-4} alkoxy or C_{1-4} alkylamino chains each being branched or unbranched;

20

phenyl, furanyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, pyridinyl, tetrahydropyridinyl, pyrimidinyl, pyridinonyl, dihydropyridinonyl, maleimidyl, dihydromaleimidyl, piperdinyl, benzimidazole, 3H-imidazo[4,5-b]pyridine, piperazinyl, pyridazinyl or pyrazinyl; each being optionally independently substituted with one to three C_{1-4} alkyl, C_{1-4} alkoxy, hydroxy, nitrile, amino, mono- or di-(C_{1-3} alkyl)amino, mono- or di-(C_{1-3} alkylamino)carbonyl, $\text{NH}_2\text{C(O)}$, C_{1-6} alkyl- S(O)_m or halogen;

25

Y is:

a bond or a C_{1-4} saturated or unsaturated branched or unbranched carbon chain optionally partially or fully halogenated, wherein one or more C atoms are optionally replaced by O, N, or S(O)_m and wherein Y is optionally independently substituted with one to two oxo groups, nitrile, phenyl, hydroxy or one or more C_{1-4} alkyl optionally substituted by one or more halogen atoms;

30

Z is:

aryl, indanyl, heteroaryl selected from benzimidazolyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, imidazolyl, pyrazolyl, triazolyl, tetrazolyl, furanyl, thienyl and pyranyl, heterocycle selected from piperazinyl, tetrahydropyrimidonyl, cyclohexanonyl, cyclohexanolyl, 2-oxa- or 2-thia-5-aza-bicyclo[2.2.1]heptanyl, 5 pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetramethylene sulfidyl, tetramethylene sulfoxidyl or tetramethylene sulfonyl, tetrahydropyranyl, tetrahydrofuranyl, 1,3-dioxolanonyl, 1,3-dioxanonyl, 1,4-dioxanyl, morpholino, thiomorpholino, thiomorpholino sulfoxidyl, thiomorpholino sulfonyl, piperidinyl, piperidinonyl, pyrrolidinyl and dioxolanyl,

10 each of the aforementioned Z are optionally substituted with one to three halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₃ alkoxy-C₁₋₃ alkyl, C₁₋₆ alkoxy carbonyl, aroyl, heteroaroyl, heterocycleC₁₋₃ acyl wherein the heteroaryl and heterocycle are as defined hereinabove in this paragraph, C₁₋₃ acyl, oxo, hydroxy, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl, tetrahydrofuranyl-C₁₋₃ alkyl, nitrile-C₁₋₃ alkyl, nitrile, carboxy, phenyl wherein the 15 phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, amino-S(O)_m, C₁₋₆ alkyl-S(O)_m or phenyl-S(O)_m wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy, halogen or mono- or di-(C₁₋₃ alkyl)amino;

15 or Z is optionally substituted with one to three amino, aminocarbonyl or amino-C₁₋₃ alkyl wherein the N atom is optionally independently mono- or di-substituted by aminoC₁₋₆ alkyl, C₁₋₃ alkyl, arylC₀₋₃ alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, C₁₋₅ alkoxy, aroyl, C₁₋₃ acyl, C₁₋₃ alkyl-S(O)_m- or arylC₀₋₃ alkyl-S(O)_m- each of the aforementioned alkyl and aryl attached to the amino group is optionally substituted with one to two halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino;

20 25 or Z is optionally substituted with one to three aryl, heterocycle or heteroaryl as hereinabove described in this paragraph each in turn is optionally substituted by halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy;

or Z is hydroxy, hydroxyC₁₋₃ alkyl, halogen, nitrile, amino wherein the N atom is optionally independently mono- or di-substituted by C₁₋₆ alkyl, aminoC₁₋₆ alkyl, arylC₀₋₃ alkyl, C₁₋₅ 30 alkoxyC₁₋₃ alkyl, C₁₋₅ alkoxy, aroyl, C₁₋₃ acyl, C₁₋₃ alkyl-S(O)_m- , arylC₀₋₃ alkyl-S(O)_m- , nitrileC₁₋₄ alkyl or C₁₋₃ alkoxyC₁₋₃ alkyl, each of the aforementioned alkyl and aryl attached to the amino group is optionally substituted with one to two halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkoxyheteroarylC₀₋₃ alkyl, heteroarylC₀₋₃ alkyl or heterocyclyeC₀₋₃ alkyl wherein the heteroaryl and 35 heterocycle is hereinabove described in this paragraph,

or Z is C₁₋₆ alkyl branched or unbranched, C₁₋₆ alkoxy, C₁₋₃ acylamino,

nitrileC₁₋₄alkyl, C₁₋₆ alkyl-S(O)_m, and phenyl-S(O)_m, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino;

- 5 R₁ is :
- a) C₁₋₁₀ branched or unbranched alkyl optionally partially or fully halogenated, and optionally substituted with one to three phenyl, naphthyl or heterocyclic groups selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl; each such phenyl, naphthyl or heterocycle, selected from the group hereinabove described, being substituted with 0 to 5 groups selected from the group consisting of halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, C₃₋₈ cycloalkyl, C₅₋₈ cycloalkenyl, hydroxy, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated, NH₂C(O) and di(C₁₋₃)alkylaminocarbonyl;
 - b) C₃₋₇ cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl and bicycloheptyl, each optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups, or an analog of such cycloalkyl group wherein one to three ring methylene groups are replaced by groups independently selected from the group consisting of O, S, CHOH, >C=O, >C=S and NH;
 - c) C₃₋₁₀ branched alkenyl optionally partially or fully halogenated and optionally substituted with one to three C₁₋₅ branched or unbranched alkyl, phenyl, naphthyl or heterocyclic groups, with each such heterocyclic group being independently selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl and isothiazolyl, and each such phenyl, naphthyl or heterocyclic group being substituted with 0 to 5 groups selected from the group consisting of halogen, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl, bicycloheptanyl, hydroxy, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated, NH₂C(O) and mono- or di(C₁₋₃)alkylaminocarbonyl;
 - d) a C₅₋₇ cycloalkenyl selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl

and bicycloheptenyl, wherein such cycloalkenyl group is optionally substituted with one to three C₁₋₃ alkyl groups;

- 5 e) nitrile; or
- f) C₁₋₆ branched or unbranched alkoxy carbonyl, C₁₋₆ branched or unbranched alkylaminocarbonyl, C₁₋₆ branched or unbranched alkylcarbonylamino-C₁₋₃-alkyl;

R₂ is:

a C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated and optionally substituted with nitrile,

10 or R₂ is acetyl, aroyl, C₁₋₄ branched or unbranched alkoxy optionally partially or fully halogenated, halogen, methoxycarbonyl or phenylsulfonyl;

R₃ is:

- 15 a) phenyl, naphthyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, tetrahydrofuryl, isoxazolyl, isothiazolyl, quinolinyl, isoquinolinyl, indolyl, benzimidazolyl, benzofuranyl, benzoxazolyl, benzisoxazolyl, benzpyrazolyl, benzothiofuranyl, cinnolinyl, pterindinyl, phthalazinyl, naphthypyridinyl, quinoxalinyl, quinazolinyl, purinyl and indazolyl, wherein such phenyl, naphthyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of a phenyl, naphthyl, heterocycle selected from the group hereinabove described in this paragraph, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl, bicycloheptyl, phenyl C₁₋₅ alkyl, naphthyl C₁₋₅ alkyl, halogen, hydroxy, oxo, nitrile, C₁₋₃ alkoxy optionally partially or fully halogenated,
- 20 C₁₋₃ alkoxyC₁₋₅alkyl, C₁₋₃thioalkyl, C₁₋₃thioalkylC₁₋₅alkyl, phenyloxy, naphthyloxy, heteraryloxy wherein the heterocyclic moiety is selected from the group hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclamino wherein the heterocyclyl moiety is selected from the group hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, amino-S(O)₂, di-(C₁₋₃)alkylamino-S(O)₂,
- 25 R₄-C₁₋₅ alkyl, R₅-C₁₋₅ alkoxy, R₆-C(O)-C₁₋₅ alkyl and R₇-C₁₋₅ alkyl(R₈)N, carboxy-mono- or di-(C₁₋₅)-alkyl-amino;

- 5 b) a fused aryl selected from the group consisting of benzocyclobutanyl, indanyl, indenyl, dihydronaphthyl, tetrahydronaphthyl, benzocycloheptanyl and benzocycloheptenyl, or a fused heterocyclyl selected from the group consisting of cyclopentenopyridine, cyclohexanopyridine, cyclopantanopyrimidine, cyclohexanopyrimidine, cyclopantanopyrazine, cyclohexanopyrazine, cyclopantanopyridazine, cyclohexanopyridazine, cyclopentanoquinoline, cyclohexanoquinoline, cyclopentanoisoquinoline, cyclohexanoisoquinoline, cyclopentanoindole, cyclohexanoindole, cyclopantanobenzimidazole, cyclohexanobenzimidazole, cyclopantanobenzoxazole, cyclohexanobenzoxazole, cyclopentanoimidazole, cyclohexanoimidazole, cyclopentanothiophene and cyclohexanothiophene; wherein the fused aryl or fused heterocyclyl ring is substituted with 0 to 3 groups independently selected from the group consisting of phenyl, naphthyl and heterocyclyl selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl, and isothiazolyl, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, halogen, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated, phenoxy, naphthoxy, heterocyclyloxy wherein the heterocyclyl moiety is selected from the group hereinabove described, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocyclylamino wherein the heterocyclyl moiety is selected from the group hereinabove described, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₄ alkyl-OC(O), C₁₋₅ alkyl-C(O)-C₁₋₄ branched or unbranched alkyl, an amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, R₉-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkoxy, R₁₁-C(O)-C₁₋₅ alkyl and R₁₂-C₁₋₅ alkyl(R₁₃)N;
- 10 c) cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl and bicycloheptyl, wherein the cycloalkyl is optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups;
- 15 d) C₅₋₇ cycloalkenyl selected from the group consisting of cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl and bicycloheptenyl, wherein such cycloalkenyl group is optionally substituted with one to three C₁₋₃ alkyl groups;
- 20 e) acetyl, aroyl, C₁₋₆alkoxycarbonylC₁₋₆alkyl or phenylsulfonyl; or
- 25 f) C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated;
- 30 35 or R₁ and R₂ taken together optionally form a fused phenyl or pyridinyl ring;

each R₈ and R₁₃ is independently selected from the group consisting of:
hydrogen and C₁₋₄ branched or unbranched alkyl optionally partially or fully halogenated;

each R₄, R₅, R₆, R₇, R₉, R₁₀, R₁₁ and R₁₂ is independently selected from the group consisting
5 of morpholine, piperidine, piperazine, imidazole and tetrazole;

m is 0, 1 or 2;

W is O or S;

wherein X is directly attached to one or two -Y-Z, and

10 pharmaceutically acceptable derivatives thereof.

In a preferred embodiment the p38 kinase inhibitor is selected from the compounds as
immediately described above and wherein:

15 Ar₂ is naphthyl, tetrahydronaphthyl, indanyl or indenyl and
W is O.

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as
immediately described above and wherein:

20 Ar₁ is thiophene or pyrazole each substituted independently by one to three R₁, R₂ or R₃;
X is:
a C₅₋₇ cycloalkyl or cycloalkenyl optionally substituted with one to two oxo groups or
one to three C₁₋₄ alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino chains each being branched or
unbranched;

25 phenyl, indanyl, furanyl, thienyl, imidazolyl, pyridinyl, pyrazinyl, tetrahydropyridinyl,
pyrimidinyl, pyridinonyl, piperdinyl, benzimidazole or piperazinyl; each being
optionally independently substituted with one to three C₁₋₄ alkyl, C₁₋₄ alkoxy, hydroxy,
nitrile, amino, mono- or di-(C₁₋₃ alkyl)amino, mono- or di-(C₁₋₃ alkylamino)carbonyl,
30 NH₂C(O), C₁₋₆ alkyl-S(O)_m or halogen;

Y is:
a bond or a C₁₋₄ saturated or unsaturated branched or unbranched carbon chain
optionally partially or fully halogenated, wherein one or more C atoms are optionally
35 replaced by O or N, and wherein Y is optionally independently substituted with one to
two oxo groups, nitrile, phenyl, hydroxy or one or more C₁₋₄ alkyl optionally
substituted by one or more halogen atoms;

Z is:

- phenyl, heteroaryl selected from pyridinyl, imidazolyl, furanyl and thienyl, heterocycle selected from piperazinyl, 2-oxa-5-aza-bicyclo[2.2.1]heptanyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetrahydrofuranyl, morpholino, thiomorpholino and piperidinyl,
- 5 each of the aforementioned Z are optionally substituted with one to three halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₃ alkoxy-C₁₋₃ alkyl, C₁₋₆ alkoxy carbonyl, aroyl, morpholinocarbonyl, C₁₋₃ acyl, oxo, hydroxy, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl,
- 10 tetrahydrofuranyl-C₁₋₃ alkyl, nitrile-C₁₋₃ alkyl, nitrile, carboxy, phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, amino-S(O)_m, C₁₋₆ alkyl-S(O)_m or phenyl-S(O)_m wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy, halogen or mono- or di-(C₁₋₃ alkyl)amino;
- 15 or Z is optionally substituted with one to three amino, aminocarbonyl or amino-C₁₋₃ alkyl wherein the N atom is optionally independently mono- or di-substituted by aminoC₁₋₆ alkyl, C₁₋₃ alkyl, arylC₀₋₃ alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, C₁₋₅ alkoxy, aroyl, C₁₋₃ acyl, C₁₋₃ alkyl-S(O)_m- or arylC₀₋₃ alkyl-S(O)_m- each of the aforementioned alkyl and aryl attached to the amino group are optionally substituted with one to two halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy;
- 20 or Z is optionally substituted with one to three aryl, heterocycle or heteroaryl as hereinabove described in this paragraph each in turn is optionally substituted by halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy;
- or Z is hydroxy, hydroxyC₁₋₃ alkyl, halogen, nitrile, amino wherein the N atom is optionally independently mono- or di-substituted by aroyl, C₁₋₃ acyl, C₁₋₆ alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, pyridinylC₁₋₃ alkyl, tetrahydrafuranylC₁₋₃ alkyl, nitrileC₁₋₄ alkyl or phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino,
- 25 or Z is C₁₋₆ alkyl branched or unbranched, C₁₋₆ alkoxy or nitrileC₁₋₄ alkyl;

30

R₁ is:

C₁₋₄ branched or unbranched alkyl optionally partially or fully halogenated;

- 35 cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and cycloheptyl optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups, or an analog of such cycloalkyl group wherein one to three ring methylene groups are replaced by groups independently selected from the group consisting of O, S and NH;

C_{3-10} branched alkenyl optionally partially or fully halogenated and optionally substituted with one to three C_{1-5} branched or unbranched alkyl;

5 cyclopentenyl and cyclohexenyl optionally substituted with one to three C_{1-3} alkyl groups;

R_2 is:

10 a C_{1-6} branched or unbranched alkyl optionally partially or fully halogenated and optionally substituted with nitrile;

R_3 is:

15 phenyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl and pyrazolyl, wherein such phenyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of a phenyl, heterocycle selected from the group hereinabove described in this paragraph, C_{1-6} branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, bicyclopentyl, bicyclohexyl, bicycloheptyl, phenyl C_{1-5} alkyl, naphthyl C_{1-5} alkyl, halogen, hydroxy, oxo, nitrile, C_{1-3} alkoxy optionally be partially or fully halogenated, C_{1-3} alkoxy C_{1-5} alkyl, C_{1-3} thioalkyl, C_{1-3} thioalkyl C_{1-5} alkyl, phenoxy, naphthoxy, heteraryloxy wherein the heterocyclic moiety is selected from the group hereinabove described in this paragraph, nitro, amino, mono- or di-(C_{1-3})alkylamino, phenylamino, naphthylamino, heterocyclylamino wherein the heterocyclyl moiety is selected from the group hereinabove described in this paragraph, $NH_2C(O)$, a mono- or di-(C_{1-3})alkyl aminocarbonyl, C_{1-5} alkyl-C(O)- C_{1-4} alkyl, amino- C_{1-5} alkyl, mono- or di-(C_{1-3})alkylamino- C_{1-5} alkyl, amino-S(O)₂, di-(C_{1-3})alkylamino-S(O)₂, R_4 - C_{1-5} alkyl, R_5 - C_{1-5} alkoxy, R_6 -C(O)- C_{1-5} alkyl and R_7 - C_{1-5} alkyl(R_8)N, carboxy-mono- or di-(C_{1-5})-alkyl-amino;

20 a fused aryl selected from the group consisting of benzocyclobutanyl, indanyl, indenyl; wherein the fused aryl is substituted with 0 to 3 groups independently selected from the group consisting of phenyl, naphthyl and heterocyclyl selected from the group consisting of pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl, and isothiazolyl, C_{1-6} branched or unbranched alkyl which is optionally partially or fully halogenated, halogen, nitrile, C_{1-3} alkoxy which is optionally partially or fully halogenated, phenoxy, naphthoxy, heterocyclxyloxy wherein the heterocyclyl moiety is selected from the group

25

30

35

hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃)alkylamino, phenylamino, naphthylamino, heterocycllamino wherein the heterocycl moiety is selected from the group hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃)alkyl aminocarbonyl, C₁₋₄ alkyl-OC(O), C₁₋₅ alkyl-C(O)-C₁₋₄ branched or unbranched alkyl, an amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, R₉-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkoxy, R₁₁-C(O)-C₁₋₅ alkyl and R₁₂-C₁₋₅ alkyl(R₁₃)N;

cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, wherein the cycloalkyl is optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups;

C₁₋₆alkoxycarbonylC₁₋₆alkyl;

or R₁ and R₂ taken together optionally form a fused phenyl or pyridinyl ring;

each R₈ and R₁₃ is independently selected from the group consisting of:
hydrogen and C₁₋₄ branched or unbranched alkyl optionally partially or fully halogenated;
and
each R₄, R₅, R₆, R₇, R₉, R₁₀, R₁₁ and R₁₂ is independently selected from the group consisting of morpholine, piperidine, piperazine, imidazole and tetrazole;

wherein X is directly attached to one -Y-Z.

In yet another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

Ar₁ is pyrazole;

X is:

cyclopentenyl, cyclohexenyl, cycloheptenyl, optionally substituted with an oxo group or one to three C₁₋₄ alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino chains each being branched or unbranched;

phenyl, furanyl, thienyl, pyridinyl, pyrazinyl piperidinyl or pyrimidinyl each being optionally independently substituted with one to three C₁₋₂ alkyl, C₁₋₂alkoxy, hydroxy or halogen;

Z is:

phenyl, heteroaryl selected from pyridinyl, imidazolyl and furanyl, heterocycle selected from 2-oxa-5-aza-bicyclo[2.2.1]heptanyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetrahydrofuranyl, tetrahydropyranyl, piperazinyl, morpholino, thiomorpholino, thiomorpholino sulfoxide and piperidinyl,

5 each of the aforementioned Z are optionally substituted with one to three halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₃ alkoxy-C₁₋₃ alkyl, C₁₋₆ alkoxy carbonyl, aroyl, morpholinocarbonyl, C₁₋₃ acyl, oxo, hydroxy, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl, tetrahydrofuranyl-C₁₋₃ alkyl, nitrile-C₁₋₃ alkyl, nitrile, carboxy, phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or

10 mono- or di-(C₁₋₃ alkyl)amino, amino-S(O)_m, C₁₋₆ alkyl-S(O)_m, or phenyl-S(O)_m wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy, halogen or mono- or di-(C₁₋₃ alkyl)amino;

or Z is optionally substituted with one to three amino, aminocarbonyl or amino-C₁₋₃ alkyl wherein the N atom is optionally independently mono- or di-substituted by aminoC₁₋₆ alkyl, C₁₋₃ alkyl, arylC₀₋₃ alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, C₁₋₅ alkoxy, aroyl, C₁₋₃ acyl, C₁₋₃ alkyl-S(O)_m, pyridinylC₀₋₃ alkyl, tetrahydrafuranylC₀₋₃ alkyl, or arylC₀₋₃ alkyl-S(O)_m each of the aforementioned alkyl and aryl attached to the amino group is optionally substituted with one to two halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy;

15 or Z is hydroxy, hydroxyC₁₋₃ alkyl, halogen, nitrile, amino wherein the N atom is optionally independently mono- or di-substituted by C₁₋₆ alkyl, pyridinylC₀₋₃ alkyl, tetrahydrafuranylC₀₋₃ alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, C₁₋₃ acyl, nitrileC₁₋₄ alkyl or phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino,

20 or Z is C₁₋₆ alkyl branched or unbranched, C₁₋₆ alkoxy or nitrileC₁₋₄ alkyl;

25 R₁ is:

C₁₋₄ branched or unbranched alkyl optionally partially or fully halogenated;

30 cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl and cycloheptanyl optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups, or an analog of such cycloalkyl group wherein one to three ring methylene groups are replaced by groups independently selected from the group consisting of O, S and NH;

35 C₃₋₁₀ branched alkenyl optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ branched or unbranched alkyl;

cyclopentenyl and cyclohexenyl optionally substituted with one to three C₁₋₃ alkyl groups;

R₂ is:

5 a C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated and optionally substituted with nitrile;

R₃ is:

10 phenyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, pyridazinyl and pyrazolyl, wherein such phenyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of a phenyl, heterocycle selected from the group hereinabove described in this paragraph, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, phenyl C₁₋₅ alkyl, halogen, hydroxy, oxo, nitrile, C₁₋₃ alkoxy optionally partially or fully halogenated, C₁₋₃thioalkyl, C₁₋₃thioalkylC₁₋₅alkyl, amino, mono- or di-(C₁₋₃)alkylamino, NH₂C(O) or a mono- or di-(C₁₋₃)alkyl aminocarbonyl,

C₁₋₆alkoxycarbonylC₁₋₆alkyl;

20 or R₃ is cyclopropyl or cyclopentyl each optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups

or R₁ and R₂ taken together optionally form a fused phenyl or pyridinyl ring.

25 In yet still another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

Y is -CH₂-, -O-(CH₂)₀₋₃-, -CH₂CH₂-, -CH₂NH-, -CH₂CH₂-NH-, NH-CH₂CH₂-, -CH₂-NH-CH₂-, -NH-, -NH-C(O)-, -C(O)-, -CH(OH)-, -CH₂(CH₂CH₃)- or a bond;

30 X is:
cyclohexenyl optionally substituted with an oxo group or one to three C₁₋₄ alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino chains each being branched or unbranched;

35 phenyl, pyridinyl, pyrazinyl, piperidinyl or pyrimidinyl each being optionally independently substituted with one to three C₁₋₂ alkyl, C₁₋₂alkoxy, hydroxy or halogen;

Z is:

phenyl, heteroaryl selected from pyridinyl, imidazolyl and furanyl, heterocycle selected from 2-oxa-5-aza-bicyclo[2.2.1]heptanyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetrahydrofuranyl, tetrahydropyranyl, piperazinyl, morpholino, thiomorpholino, thiomorpholino sulfoxide and piperidinyl,

5 each of the aforementioned Z are optionally substituted with one to three halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₃ alkoxy-C₁₋₃ alkyl, C₁₋₆ alkoxycarbonyl, aroyl, morpholinocarbonyl, C₁₋₃ acyl, oxo, hydroxy, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl, tetrahydrofuranyl-C₁₋₃ alkyl, nitrile-C₁₋₃ alkyl, nitrile, carboxy, phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, amino-S(O)_m, C₁₋₆ alkyl-S(O)_m, or phenyl-S(O)_m 10 wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy, halogen or mono- or di-(C₁₋₃ alkyl)amino;

or Z is optionally substituted with one to three amino or aminocarbonyl wherein the N atom is optionally independently mono- or di-substituted by aminoC₁₋₆alkyl, C₁₋₃alkyl, 15 arylC₀₋₃alkyl, C₁₋₅ alkoxyC₁₋₃ alkyl, C₁₋₅ alkoxy, aroyl, C₁₋₃acyl, C₁₋₃alkyl-S(O)_m- or arylC₀₋₃alkyl-S(O)_m- each of the aforementioned alkyl and aryl attached to the amino group is optionally substituted with one to two halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy;

or Z is hydroxy, hydroxyC₁₋₃alkyl, halogen, nitrile, amino wherein the N atom is optionally independently mono- or di-substituted by C₁₋₃alkyl, pyridinylC₁₋₂alkyl, 20 tetrahydrafuranylC₁₋₂alkyl, C₁₋₃ alkoxyC₁₋₃ alkyl, C₁₋₃acyl, nitrileC₁₋₄alkyl, phenyl wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino,

or Z is C₁₋₆alkyl branched or unbranched, C₁₋₆alkoxy or nitrileC₁₋₄alkyl;

25 R₁ is:
C₁₋₄ branched or unbranched alkyl optionally partially or fully halogenated;

R₂ is:
a C₁₋₃ branched or unbranched alkyl optionally partially or fully halogenated and 30 optionally substituted with nitrile;

R₃ is:
phenyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, and pyrazolyl, wherein such phenyl or heterocyclic group is optionally substituted with one to five groups selected from the group consisting of C₁₋₃ branched or unbranched alkyl which is optionally partially or fully halogenated, C₁₋₃ alkoxy 35

which optionally partially or fully halogenated, C₁₋₃thioalkyl, C₁₋₃thioalkylC₁₋₅alkyl, amino or NH₂C(O);

C₁₋₃alkoxycarbonyl;

5

or R₃ is cyclopropyl or cyclopentyl each optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups.

- 10 In a further embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:
 - Ar₁ is 5-tert-butyl-pyrazol-3-yl; wherein the pyrazole ring is substituted independently by one to two R₂ or R₃;
 - X is:
 - 15 cyclohexenyl;
 - phenyl, pyridinyl, pyrazinyl, piperidinyl or pyrimidinyl each being optionally independently substituted with C₁₋₂alkoxy or hydroxy;
 - Z is:
 - 20 phenyl, heteroaryl selected from pyridinyl and furanyl, heterocycle selected from 2-oxa-5-aza-bicyclo[2.2.1]heptanyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, tetrahydrofuranyl, piperazinyl, morpholino, thiomorpholino and piperidinyl, each of the aforementioned Z are optionally substituted with one to three C₁₋₃ alkyl, C₁₋₃ alkoxy, oxo , hydroxy or NH₂C(O)-;
 - 25 or Z is hydroxyC₁₋₃alkyl, amino wherein the N atom is optionally independently mono- or di-substituted by pyridinylmethyl, tetrahydrafuranylmethyl, C₁₋₃ alkoxyC₁₋₃ alkyl, C₁₋₃acyl or nitrileC₁₋₄alkyl,
 - or Z is nitrileC₁₋₄alkyl;
 - R₃ is:
 - 30 phenyl or heterocyclic group selected from the group consisting of pyridinyl, pyrimidinyl, and pyrazolyl, wherein such phenyl or heterocyclic group is optionally substituted with one to two groups selected from the group consisting of C₁₋₂ alkyl which is optionally partially or fully halogenated, C₁₋₂ alkoxy which optionally partially or fully halogenated, C₁₋₂thioalkyl, C₁₋₂thioalkylC₁₋₃alkyl, amino or NH₂C(O);

C_{1-3} alkoxycarbonyl;

or R_3 is cyclopropyl or cyclopentyl each optionally partially or fully halogenated and optionally substituted with one to three C_{1-3} alkyl groups.

5

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein X is pyridinyl.

- 10 In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein the pyridinyl is attached to Ar_1 via the 3-pyridinyl position.

The following compounds are preferred compounds of the p38 kinase inhibitors which can be

- 15 used in the methods described herein:

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-morpholin-4-yl-methylphenyl)-naphthalen-1-yl]-urea;

- 20 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[3-(4-morpholin-4-yl-methylphenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(5-morpholin-4-yl-methylfuran-2-yl)-naphthalen-1-yl]-urea;

- 25 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl-methyl)cyclohexenyl)-naphthalen-1-yl]-urea;

- 30 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(4-morpholin-4-yl)ethylphenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-dimethylaminomethylphenyl)-naphthalen-1-yl]-urea;

- 35 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-4-yl-methyl)pyridin-2-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-methyl-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-(morpholin-4-yl)ethylamino)cyclohexenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3,4-(morpholin-4-yl-methyl)phenyl)-naphthalen-1-yl]-urea;

15 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-methylpiperzin-1-yl-methyl)phenyl)-naphthalen-1-yl]-urea;

20 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(piperdin-1-yl-methyl)phenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-(pyridin-2-yl)ethylamino)cyclohexenyl)-naphthalen-1-yl]-urea;

25 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(2-(pyridin-4-yl)ethylaminomethyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(pyridin-3-yl-methylaminomethyl)phenyl)naphthalen-1-yl]-urea;

30 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(3,4-dimethoxyphenylmethyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

35 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-oxo-1,6-dihydro-pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-

methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-methyl)imidazol-1-yl)naphthalen-1-yl]-urea;

5

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-methyl)imidazol-1-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(furan-3-yl-methyl)-3-

10 hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(4-hydroxybutylamino)pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(pyridin-3-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(4-methyl-3-carbamylphenyl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

20

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(imidazol-2-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(3-hydroxymorpholin-4-yl-

25 methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-2-methoxyethy-N-methylaminomethyl)phenyl)naphthalen-1-yl]-urea;

30 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(4-hydroxymorpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl-methyl)cyclohexenyl)-naphthalen-1-yl]-urea;

35

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(tetrahydrofuran-3-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N,N-di-(2-methoxyethyl)aminomethyl)phenyl)naphthalen-1-yl]-urea;

5 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(3-cyanopropoxy)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-morpholin-4-yl-methyl-piperdinyl)naphthalen-1-yl]-urea;

10

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N,N-di-(2-cyanoethyl)aminomethyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(1-morpholin-4-yl-indan-5-yl)-naphthalen-1-

15 yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(furan-2-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

20 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(thiomorpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(3-carboxamidomorpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

25

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(2-methyl-3-oxo-piperzin-1-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-

30 methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(4-hydroxybutyloxy)pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-[3-tert-butyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(furan-2-yl-methyl)-3-methoxyphenyl)naphthalen-1-yl]-urea;

- 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-5-carbonyl)pyrazin-2-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydrothiopyran-4-yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

- 10 1-[5-tert-butyl-2-(2-cyanoethyl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(2,6-dimethylmorpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

- 15 1-[5-tert-butyl-2-(2-methoxypyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-aminopyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-

- 20 methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-oxo-1,6-dihydropyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

- 25 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-4-carbonyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(2-oxa-5-aza-bicyclo[2.2.1]hept-5-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

- 30 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(3-carbamylphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-(2-cyanoethyl)-N-(pyridin-3-yl-methyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

- 35 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-(2-cyanoethyl)-N-(pyridin-2-yl-methyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-(2-cyanoethyl)-N-(tetrahydrofuran-2-yl-methyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

- 5 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)-4-methoxypyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-morpholin-4-yl-propyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

10

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(N-(3-methoxypropyl)amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(N-(3-methoxypropyl)-N-

15 methylamino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[3-tert-butyl-1'-methyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

- 20 1-[5-tert-butyl-2-benzyl-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-N-di-(2-cyanoethyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

25

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(4-carbamylphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-tetrahydrothiopyran-4yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

30

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydropyran-4yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[3-tert-butyl-1'-(3-cyanopropyl)-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-

35 methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-methanesulfinylphenyl)naphthalen-1-yl]-

urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-methanesulfonylphenyl)naphthalen-1-yl]-urea;

5

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-sulfonamidophenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl)carbonylphenyl)naphthalen-1-yl]-urea;

10

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(5-(tetrahydrothiopyran-4-yl-amino)pyrazin-2-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-

15 (methylcarbonylamino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-4-carbonyl)phenyl)-naphthalen-1-yl]-urea;

20 1-[3-tert-butyl-1'-(3-methylsulfonylpropyl)-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-4-yl-carbonyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

25

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-4-yl-methyl)pyrazin-2-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-aminopyridin-3-

30 yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-methylpiperdin-4-yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

35 1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(2-methyl-3-oxo-piperzin-1-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-carbonyl)pyridin-3-yl)naphthalen-1-yl]-urea;

- 5 1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(N,N-di-(2-methoxyethyl)aminomethyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

- 10 1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydropyran-4-yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-4-yl-methyl)pyrazin-2-yl)naphthalen-1-yl]-urea;

- 15 1-[5-tert-butyl-2-(2-methylthiopyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(2-methyl-3-oxo-piperzin-1-yl-

- 20 methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(pyridin-3-yl-oxy)pyridin-3-yl)naphthalen-1-yl]-urea

- 25 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(pyridin-3-yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methoxypyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

- 30 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(5-carbamylpyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-aminopyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-

- 35 methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-

methyl)phenyl)naphthalen-1-yl]-urea;

1-[3-tert-butyl-1'-methyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

5

1-[5-tert-butyl-2-(2-cyclopropylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(pyridin-3-yl-amino)pyrimidin-5-

10 yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-tetrahydrothiopyran-4-yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

15 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-benzyl-3H-imidazo[4,5-b]pyridin-6-yl)naphthalen-1-yl]-urea;

20

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(pyridin-3-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-carbonyl)pyrimidin-5-

25 yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-methyl)pyrimidin-5-yl)naphthalen-1-yl]-urea;

30 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(3-amino-4-carbamylphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

35

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(pyridin-3-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(hydroxy-pyridin-3-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

- 5 1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-methyl)pyrimidin-5-yl)naphthalen-1-yl]-urea;
 and the pharmaceutically acceptable derivatives thereof.

The following compounds are more preferred compounds of the p38 kinase inhibitors which

- 10 can be used in the methods described herein:

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(5-(morpholin-4-yl-methyl)pyridin-2-yl)-naphthalen-1-yl]-urea;

- 15 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(2-(pyridin-2-yl)ethylamino)cyclohexenyl)-naphthalen-1-yl]-urea;

- 20 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(4-(pyridin-3-yl-methylaminomethyl)phenyl)naphthalen-1-yl]-urea;

- 25 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(4-hydroxybutylamino)pyridin-3-yl)-naphthalen-1-yl]-urea;

- 30 1-[5-tert-butyl-2-(4-methyl-3-carbamylphenyl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(3-hydroxypiperidin-1-yl-methyl)phenyl)naphthalen-1-yl]-urea;

- 35 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(4-hydroxymorpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(3-(morpholin-4-yl-methyl)cyclohexenyl)-naphthalen-1-yl]-urea;

- 5 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(tetrahydrofuran-3-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N,N-di-(2-methoxyethyl)aminomethyl)phenyl)naphthalen-1-yl]-urea;

10

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(3-cyanopropoxy)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-morpholin-4-yl-methyl-

15 piperdinyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N,N-di-(2-cyanoethyl)aminomethyl)phenyl)naphthalen-1-yl]-urea;

20 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(furan-2-yl-methyl)-3-hydroxyphenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(thiomorpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

25

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(3-carboxamidopiperidin-1-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(2-methyl-3-oxo-piperzin-

30 1-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

35 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(4-hydroxybutyloxy)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[3-tert-butyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydrothiopyran-4-yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-cyanoethyl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(2,6-dimethylmorpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methoxypyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-[5-tert-butyl-2-(2-aminopyridin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-4-

20 carbonyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(2-oxa-5-aza-bicyclo[2.2.1]hept-5-yl-methyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-(2-cyanoethyl)-N-(pyridin-3-yl-methyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(4-(N-(2-cyanoethyl)-N-(tetrahydrofuran-2-yl-methyl)aminomethyl)phenyl)-naphthalen-1-yl]-urea;

30 1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)-4-methoxypyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-morpholin-4-yl-propyl)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[3-tert-butyl-1'-methyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-

yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-tetrahydrothiopyran-4yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

5

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydropyran-4yl-amino)pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(5-(tetrahydrothiopyran-4yl-

10 amino)pyrazin-2-yl)-naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(6-methyl-pyridin-3-yl)-2H-pyrazol-3-yl]-3-[4-(6-(methylcarbonylamino)pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-[3-tert-butyl-1'-(3-methylsulfanylpropyl)-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

20

1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(tetrahydropyran-4yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-methylthiopyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-

25 methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-(2-aminopyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(6-(morpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

30 1-[3-tert-butyl-1'-methyl-1'H-[1,4']bipyrazol-5-yl]-3-[4-(6-(morpholin-4-yl-methyl)phenyl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-tetrahydrothiopyran-4yl-amino)pyridin-3-yl)naphthalen-1-yl]-urea;

35

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-carbonyl)pyrimidin-5-yl)naphthalen-1-yl]-urea;

5 1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-methyl)pyrimidin-5-yl)naphthalen-1-yl]-urea;

1-[5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl]-3-[4-(6-(1-oxo-thiomorpholin-4-yl-methyl)pyridin-3-yl)naphthalen-1-yl]-urea;

10

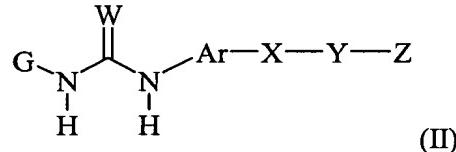
1-[5-tert-butyl-2-(2-methylpyrimidin-5-yl)-2H-pyrazol-3-yl]-3-[4-(2-(morpholin-4-yl-methyl)pyrimidin-5-yl)naphthalen-1-yl]-urea and

the pharmaceutically acceptable derivatives thereof.

15

In another preferred embodiment the invention provides a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of a p38 MAP kinase inhibitor chosen from the compounds of formula (II) disclosed in WO

20 00/55139 and corresponding US patent no. 6,358,945:



wherein:

25 G is :

an aromatic C₆₋₁₀ carbocycle or a nonaromatic C₃₋₁₀ carbocycle saturated or unsaturated;

a 6-10 membered heteroaryl containing 1 or more heteroatoms chosen from O, N and S;

30 a 5-8 membered monocyclic heterocycle containing one or more heteroatoms chosen from O, N and S;

or

an 8-11 membered bicyclic heterocycle, containing one or more heteroatoms chosen from O, N and S;

35 wherein G is substituted by one or more R₁, R₂ or R₃;

Ar is:

phenyl, naphthyl, quinolinyl, isoquinolinyl, tetrahydronaphthyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, benzimidazolyl, benzofuranyl, dihydrobenzofuranyl, indolinyl, benzothienyl, dihydrobenzothienyl, indanyl, indenyl or indolyl each being optionally substituted by one or more R₄ or R₅;

X is:

a C₅₋₈ cycloalkyl or cycloalkenyl optionally substituted with one to two oxo groups or one to three C₁₋₄ alkyl, C₁₋₄ alkoxy or C₁₋₄ alkylamino chains;

phenyl, furanyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, pyridinyl, pyrimidinyl, pyridinonyl, dihydropyridinonyl, maleimidyl, dihydromaleimidyl, piperdinyl, benzimidazole, 3H-imidazo[4,5-b]pyridine, piperazinyl, pyridazinyl or pyrazinyl;

Y is:

a bond or a C₁₋₄ saturated or unsaturated branched or unbranched carbon chain optionally partially or fully halogenated, wherein one or more methylene groups are optionally replaced by O, N, or S(O)_m and wherein Y is optionally independently substituted with one to two oxo groups, phenyl or one or more C₁₋₄ alkyl optionally substituted by one or more halogen atoms;

Z is:

phenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, imidazolyl, pyrazolyl, triazolyl, tetrazolyl, furanyl, thienyl, pyranyl each being optionally substituted with one to three halogen, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, amino, mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m, CN, CONH₂, COOH or phenylamino wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkyl or C₁₋₆ alkoxy; tetrahydropyranyl, tetrahydrofuranyl, 1,3-dioxolanonyl, 1,3-dioxanonyl, 1,4-dioxanyl, morpholinyl, thiomorpholinyl, thiomorpholino sulfoxidyl, thiomorpholino sulfonyl, piperidinyl, piperidinonyl, piperazinyl, tetrahydropyrimidonyl, cyclohexanonyl, cyclohexanolyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetramethylene sulfide, tetramethylene sulfoxidyl or tetramethylene sulfonyl each being optionally substituted with one to three nitrile, C₁₋₆ alkyl, C₁₋₆ alkoxy, hydroxy, amino, mono- or di-(C₁₋₃ alkyl)amino-C₁₋₃ alkyl, CONH₂, phenylamino-C₁₋₃ alkyl or C₁₋₃ alkoxy-C₁₋₃ alkyl;

halogen, C₁₋₄ alkyl, nitrile, amino, hydroxy, C₁₋₆ alkoxy, NH₂C(O), mono- or di(C₁₋₃ alkyl) aminocarbonyl, mono- or di(C₁₋₆ alkyl)amino, secondary or tertiary amine wherein the amino nitrogen is covalently bonded to C₁₋₃ alkyl or C₁₋₅ alkoxyalkyl, pyridinyl-C₁₋₃ alkyl, imidazolyl-C₁₋₃ alkyl, tetrahydrofuran-C₁₋₃ alkyl, nitrile-C₁₋₃ alkyl, carboxamide-C₁₋₃ alkyl, phenyl, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino, C₁₋₆ alkyl-S(O)_m, or phenyl-S(O)_m, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy, halogen or mono- or di-(C₁₋₃ alkyl)amino; C₁₋₆ alkyl-S(O)_m, and phenyl-S(O)_m, wherein the phenyl ring is optionally substituted with one to two halogen, C₁₋₆ alkoxy, hydroxy or mono- or di-(C₁₋₃ alkyl)amino;

each R₁ is independently:

C₁₋₁₀ alkyl optionally be partially or fully halogenated, and optionally substituted with one to three C₃₋₁₀ cycloalkanyl, hydroxy, phenyl, naphthyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl or isothiazolyl; each of the aforementioned being optionally substituted with one to five groups selected from halogen, C₁₋₆ alkyl which is optionally partially or fully halogenated, C₃₋₈ cycloalkanyl, C₅₋₈ cycloalkenyl, hydroxy, nitrile, C₁₋₃ alkoxy which is optionally partially or fully halogenated or NH₂C(O), mono- or di(C₁₋₃ alkyl)amino, and mono- or di(C₁₋₃ alkyl)aminocarbonyl;

cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, or cycloheptyloxy each being optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups optionally partially or fully halogenated, CN, hydroxyC₁₋₃ alkyl or aryl; or an analog of such cycloalkyl group wherein one to three ring methylene groups are independently replaced by O, S(O)_m, CHO, >C=O, >C=S or NH;

phenyloxy or benzyloxy each being optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups optionally partially or fully halogenated, CN, hydroxyC₁₋₃ alkyl or aryl; or an analog of such cycloaryl group wherein one to two ring methyne groups are independently replaced by N;

cyclopropanyl, cyclobutanyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl or bicycloheptanyl, each being optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups optionally partially or fully halogenated, CN, hydroxyC₁₋₃ alkyl or aryl; or an analog of

- such cycloalkyl group wherein one to three ring methylene groups are independently replaced by O, S(O)_m, CHOH, >C=O, >C=S or NH;
- 5 C₃₋₁₀ branched or unbranched alkenyl each being optionally partially or fully halogenated, and optionally be substituted with one to three C₁₋₅ branched or unbranched alkyl, phenyl, naphthyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl or isothiazolyl, each of the aforementioned being substituted with zero to five halogen, C₁₋₆ alkyl which is optionally partially or fully halogenated, cyclopropanyl, cyclobutanyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl and bicycloheptanyl, hydroxy, nitrile, C₁₋₃ alkyloxy which is optionally partially or fully halogenated, NH₂C(O), mono- or di(C₁₋₃alkyl)aminocarbonyl; the C₃₋₁₀ branched or unbranced alkenyl being optionally interrupted by one or more heteroatoms chosen from O, N and S(O)_m;
- 10 15 cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl, bicyclohexenyl or bicycloheptenyl, wherein such cycloalkenyl group is optionally substituted with one to three C₁₋₃ alkyl groups;
- 20 20 nitrile, halogen;
- methoxycarbonyl, ethoxycarbonyl and propoxycarbonyl;
- silyl containing three C₁₋₄ alkyl groups optionally partially or fully halogenated;
- 25 25 C₃₋₆ alkynyl branched or unbranched carbon chain optionally partially or fully halogenated, wherein one or more methylene groups are optionally replaced by O, NH or S(O)_m and wherein said alkynyl group is optionally independently substituted with one to two oxo groups, pyrrolidinyl, pyrrolyl, one or more C₁₋₄ alkyl optionally substituted by one or more halogen atoms, nitrile, morpholino, piperidinyl, piperazinyl, imidazolyl, phenyl, pyridinyl, tetrazolyl, or mono- or di(C₁₋₃alkyl)amino optionally substituted by one or more halogen atoms;
- 30 30 each R₂, R₄, and R₅ is
- 35 a C₁₋₆ branched or unbranched alkyl optionally partially or fully halogenated, acetyl, aroyl, C₁₋₄ branched or unbranched alkoxy, each being optionally partially or fully

halogenated, halogen, nitrile, methoxycarbonyl, C₁₋₃ alkyl-S(O)_m optionally partially or fully halogenated, or phenylsulfonyl;

C₁₋₆ alkoxy, hydroxy, amino, or mono- or di-(C₁₋₄ alkyl)amino, nitrile, halogen;

5

OR₆;

nitro; or

10 mono- or di-(C₁₋₄ alkyl)amino-S(O)₂ optionally partially or fully halogenated, or H₂NSO₂;

each R₃ is independently:

15 phenyl, naphthyl, morpholinyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrrolidinyl, imidazolyl, pyrazolyl, thiazolyl, oxazoyl, triazolyl, tetrazolyl, thienyl, furyl, tetrahydrofuryl, isoxazolyl, isothiazolyl, quinolinyl, isoquinolinyl, indolyl, benzimidazolyl, benzofuranyl, benzoxazolyl, benzisoxazolyl, benzpyrazolyl, benzothiofuranyl, cinnolinyl, pterindinyl, phthalazinyl, naphthypyridinyl, quinoxalinyl, quinazolinyl, purinyl or indazolyl, each of the aforementioned is optionally substituted with one to three phenyl, naphthyl, heterocycle or heteroaryl as hereinabove described in this paragraph, C₁₋₆ branched or unbranched alkyl which is optionally partially or fully halogenated, cyclopropanyl, cyclobutanyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl, bicycloheptanyl, phenyl C₁₋₅ alkyl, naphthyl C₁₋₅ alkyl, halogen, hydroxy, oxo, nitrile, C₁₋₃ alkyloxy optionally partially or fully halogenated, phenoxy, naphthoxy, heteroaryloxy or heterocyclicoxy wherein the heterocyclic or heteroaryl moiety is as hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃alkyl)amino, phenylamino, naphthylamino, heteroaryl or heterocyclic amino wherein the heteroaryl heterocyclic moiety is as hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃alkyl) aminocarbonyl, C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, amino-C₁₋₅ alkyl, mono- or di-(C₁₋₃alkyl)amino-C₁₋₅ alkyl, amino-S(O)₂, di-(C₁₋₃alkyl)amino-S(O)₂, R₇-C₁₋₅ alkyl, R₈-C₁₋₅ alkoxy, R₉-C(O)-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkyl(R₁₁)N, carboxy-mono- or di-(C₁₋₅alkyl)-amino;

35 a fused aryl selected from benzocyclobutanyl, indanyl, indenyl, dihydronaphthyl, tetrahydronaphthyl, benzocycloheptanyl and benzocycloheptenyl, or a fused heteroaryl selected from cyclopentenopyridinyl, cyclohexanopyridinyl, cyclopantanopyrimidinyl, cyclohexanopyrimidinyl, cyclopantanopyrazinyl, cyclohexanopyrazinyl,

cyclopentanopyridazinyl, cyclohexanopyridazinyl, cyclopentanoquinolinyl,
 cyclohexanoquinolinyl, cyclopentanoisoquinolinyl, cyclohexanoisoquinolinyl,
 cyclopentanoindolyl, cyclohexanoindolyl, cyclopentanobenzimidazolyl,
 cyclohexanobenzimidazolyl, cyclopentanobenzoxazolyl, cyclohexanobenzoxazolyl,
 5 cyclopentanoimidazolyl, cyclohexanoimidazolyl, cyclopentanothienyl and
 cyclohexanothienyl; wherein the fused aryl or fused heteroaryl ring is independently
 substituted with zero to three phenyl, naphthyl, pyridinyl, pyrimidinyl, pyrazinyl,
 pyridazinyl, pyrrolyl, imidazolyl, pyrazolyl, thienyl, furyl, isoxazolyl, isothiazolyl, C₁₋₆
 alkyl which is optionally partially or fully halogenated, halogen, nitrile, C₁₋₃ alkyloxy
 10 which is optionally partially or fully halogenated, phenoxy, naphthoxy,
 heteroaryloxy or heterocyclicoxy wherein the heteroaryl or heterocyclic moiety is as
 hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃alkyl)amino,
 phenylamino, naphthylamino, heteroaryl or heterocyclic amino wherein the heteroaryl
 15 or heterocyclic moiety is as hereinabove described in this paragraph, NH₂C(O), mono-
 or di-(C₁₋₃alkyl)aminocarbonyl, C₁₋₄ alkyl-OC(O), C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, amino-
 C₁₋₅ alkyl, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, R₁₂-C₁₋₅ alkyl, R₁₃-C₁₋₅ alkoxy,
 R₁₄-C(O)-C₁₋₅ alkyl or R₁₅-C₁₋₅ alkyl(R₁₆)N;

20 cyclopropanyl, cyclobutanyl, cyclopentanyl, cyclohexanyl, cycloheptanyl,
 bicyclopentanyl, bicyclohexanyl or bicycloheptanyl, each being optionally partially or
 fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups, or an
 analog of such cycloalkyl group wherein one to three ring methylene groups are
 independently replaced by O, S, CHOH, >C=O, >C=S or NH;

25 cyclopentenyl, cyclohexenyl, cyclohexadienyl, cycloheptenyl, cycloheptadienyl,
 bicyclohexenyl or bicycloheptenyl, each optionally substituted with one to three C₁₋₃
 alkyl groups;

30 C₁₋₄ alkyl-phenyl-C(O)-C₁₋₄ alkyl-, C₁₋₄ alkyl-C(O)-C₁₋₄ alkyl- or C₁₋₄ alkyl-phenyl-
 S(O)_m-C₁₋₄ alkyl-;

C₁₋₆ alkyl or C₁₋₆ branched or unbranched alkoxy each of which is optionally partially
 or fully halogenated or optionally substituted with R₁₇;

35 OR₁₈ or C₁₋₆ alkyl optionally substituted with OR₁₈;
 amino or mono- or di-(C₁₋₅alkyl)amino optionally substituted with R₁₉;

$R_{20}C(O)N(R_{21})-$, $R_{22}O-$ or $R_{23}R_{24}NC(O)-$; $R_{26}(CH_2)_mC(O)N(R_{21})-$ or
 $R_{26}C(O)(CH_2)_mN(R_{21})-$;

5 C_{2-6} alkenyl substituted by $R_{23}R_{24}NC(O)-$;

10 C_{2-6} alkynyl branched or unbranched carbon chain, optionally partially or fully halogenated, wherein one or more methylene groups are optionally replaced by O, NH, S(O)_m and wherein said alkynyl group is optionally independently substituted with one to two oxo groups, pyrroldinyl, pyrrolyl, morpholinyl, piperidinyl, piperazinyl, imidazolyl, phenyl, pyridinyl, tetrazolyl one or more C_{1-4} alkyl optionally substituted by one or more halogen atoms, nitrile, morpholino, piperidinyl, piperazinyl, imidazolyl, phenyl, pyridinyl, tetrazolyl, or mono- or di(C_{1-4} alkyl)amino optionally substituted by one or more halogen atoms; or

15 aroyl;

R_6 is a:

20 C_{1-4} alkyl optionally partially or fully halogenated and optionally substituted with R_{26} ;
 each R_7 , R_8 , R_9 , R_{10} , R_{12} , R_{13} , R_{14} , R_{15} , R_{17} , R_{19} , R_{25} and R_{26} is independently:
 nitrile, phenyl, morpholino, piperidinyl, piperazinyl, imidazolyl, pyridinyl, tetrazolyl,
 amino or mono- or di(C_{1-4} alkyl)amino optionally partially or fully halogenated;

25 each R_{11} and R_{16} is independently:
 hydrogen or C_{1-4} alkyl optionally partially or fully halogenated;

R_{18} is independently:

30 hydrogen or a C_{1-4} alkyl optionally independently substituted with oxo or R_{25} ;

R_{20} is independently:

C_{1-10} alkyl optionally partially or fully halogenated, phenyl, or pyridinyl;

R_{21} is independently:

35 hydrogen or C_{1-3} alkyl optionally partially or fully halogenated;

each R_{22} , R_{23} and R_{24} is independently:

hydrogen, C₁₋₆ alkyl optionally partially or fully halogenated, said C₁₋₆ alkyl is optionally interrupted by one or more O, N or S, said C₁₋₆ alkyl also being independently optionally substituted by mono- or di-(C₁₋₃alkyl)aminocarbonyl, phenyl, pyridinyl, amino or mono- or di-(C₁₋₄alkyl)amino each of which is optionally partially or fully halogenated and optionally substituted with mono- or di-(C₁₋₃alkyl)amino;

5 or R₂₃ and R₂₄ taken together optionally form a heterocyclic or heteroaryl ring;

m = 0, 1 or 2;

10 W is O or S and pharmaceutically acceptable derivatives thereof.

In a preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

15

G is:

phenyl, naphthyl, benzocyclobutanyl, dihydronaphthyl, tetrahydronaphthyl, benzocycloheptanyl, benzocycloheptenyl, indanyl, indenyl;

20

pyridinyl, pyridonyl, quinolinyl, dihydroquinolinyl, tetrahydroquinoyl, isoquinolinyl, tetrahydroisoquinoyl, pyridazinyl, pyrimidinyl, pyrazinyl, benzimidazolyl, benzthiazolyl, benzoxazolyl, benzofuranyl, benzothiophenyl, benzpyrazolyl, dihydrobenzofuranyl, dihydrobenzothiophenyl, benzoaxazolonyl, benzo[1,4]oxazin-3-onyl, benzodioxolyl, benzo[1,3]dioxol-2-onyl, benzofuran-3-onyl,

25

tetrahydrobenzopyranyl, indolyl, indolinyl, indolonyl, indolinonyl, phthalimidyl; oxetanyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, piperidinyl, piperazinyl, morpholinyl, tetrahydropyranyl, dioxanyl, tetramethylene sulfonyl, tetramethylene sulfoxidyl, oxazolinyl, thiazolinyl, imidazolinyl, tetrahydropyridinyl, homopiperidinyl, pyrrolinyl, tetrahydropyrimidinyl, decahydroquinolinyl,

30

decahydroisoquinolinyl, thiomorpholinyl, thiazolidinyl, dihydrooxazinyl, dihydropyranyl, oxocanyl, heptacanyl, thioxanyl or dithianyl;

wherein G is substituted by one or more R₁, R₂ or R₃;

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

G is phenyl, pyridinyl, pyridonyl, naphthyl, quinolinyl, isoquinolinyl, pyrazinyl, benzimidazolyl, benzoxazolyl, benzofuranyl, benzothiophenyl, benzpyrazolyl, dihydrobenzofuranyl, dihydrobenzothiophenyl, indanyl, indenyl, indolyl, indolinyl, indolonyl or indolinonyl, wherein G is substituted by one or more R₁, R₂ or R₃;

5

Ar is:

naphthyl, quinolinyl, isoquinolinyl, tetrahydronaphthyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, indanyl, indenyl or indolyl each being optionally substituted by one or more R₄ or R₅ groups;

10

X is:

phenyl, furanyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, pyridinyl, pyrimidinyl, pyridinonyl, dihydropyridinonyl, maleimidyl, dihydromaleimidyl, piperdanyl, piperazinyl, pyridazinyl or pyrazinyl

15

Y is:

a bond or
a C₁₋₄ saturated or unsaturated carbon chain wherein one of the carbon atoms is optionally replaced by O, N, or S(O)_m and wherein Y is optionally independently substituted with one to two oxo groups, phenyl or one or more C₁₋₄ alkyl optionally substituted by one or more halogen atoms;

Z is:

phenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, imidazolyl, furanyl, thienyl, dihydrothiazolyl, dihydrothiazolyl sulfoxidyl, pyranyl, pyrrolidinyl which are optionally substituted with one to three nitrile, C₁₋₃ alkyl, C₁₋₃ alkoxy, amino, mono- or di-(C₁₋₃ alkyl)amino, CONH₂ or OH;

tetrahydropyranyl, tetrahydrofurananyl, 1,3-dioxolanonyl, 1,3-dioxanonyl, 1,4-dioxanyl, morpholinyl, thiomorpholinyl, thiomorpholino sulfoxidyl, piperidinyl, piperidinonyl, piperazinyl, tetrahydropyrimidonyl, pentamethylene sulfidyl, pentamethylene sulfoxidyl, pentamethylene sulfonyl, tetramethylene sulfidyl, tetramethylene sulfoxidyl or tetramethylene sulfonyl which are optionally substituted with one to three nitrile, C₁₋₃ alkyl, C₁₋₃ alkoxy, amino, mono- or di-(C₁₋₃ alkyl)amino, CONH₂, or OH; nitrile, C₁₋₆ alkyl-S(O)_m, halogen, hydroxy, C₁₋₄ alkoxy, amino, mono- or di-(C₁₋₆ alkyl)amino, mono- or di-(C₁₋₃ alkyl)aminocarbonyl or NH₂C(O);

each R₁ is independently:

5 C₃₋₆ alkyl optionally partially or fully halogenated, and optionally substituted with one to three C₃₋₆cycloalkyl, phenyl, thienyl, furyl, isoxazolyl or isothiazolyl; each of the aforementioned being optionally substituted with one to three groups selected from halogen, C₁₋₃ alkyl which is optionally partially or fully halogenated, hydroxy, nitrile or C₁₋₃alkoxy which is optionally partially or fully halogenated;

- 10 cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, bicyclopentanyl or bicyclohexanyl, each being optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups optionally partially or fully halogenated, CN, hydroxyC₁₋₃alkyl or phenyl; or an analog of such cycloalkyl group wherein one to three ring methylene groups are independently replaced by O, S, CHOH, >C=O, >C=S or NH; or
- 15 silyl containing three C₁₋₄ alkyl groups optionally partially or fully halogenated;

R₂ is independently:

- 20 halogen, C₁₋₃ alkoxy, C₁₋₃ alkyl-S(O)_m optionally partially or fully halogenated, phenylsulfonyl or nitrile;
- 25 R₃ is independently:
- 30 phenyl, morpholino, pyridinyl, pyrimidinyl, pyrazinyl, pyrrolyl, pyrrolylidinyl, imidazolyl, pyrazolyl, each being optionally substituted with one to three phenyl, naphthyl, heterocycle or heteroaryl as hereinabove described in this paragraph, C₁₋₆ alkyl which is optionally partially or fully halogenated, cyclopropanyl, cyclobutanyl, cyclopentanyl, cyclohexanyl, cycloheptanyl, bicyclopentanyl, bicyclohexanyl, bicycloheptanyl, phenyl C₁₋₅ alkyl, naphthyl C₁₋₅ alkyl, halogen, oxo, hydroxy, nitrile, C₁₋₃ alkyloxy optionally partially or fully halogenated, phenoxy, naphthoxy, heteroaryloxy or heterocyclicoxy wherein the heteroaryl or heterocyclic moiety is as hereinabove described in this paragraph, nitro, amino, mono- or di-(C₁₋₃alkyl)amino, phenylamino, naphthylamino, heteroaryl or heterocyclic amino wherein the heteroaryl or heterocyclic moiety is as hereinabove described in this paragraph, NH₂C(O), a mono- or di-(C₁₋₃alkyl)aminocarbonyl, C₁₋₅ alkyl-C(O)-C₁₋₄ alkyl, mono- or di-(C₁₋₃alkyl)amino, mono- or di-(C₁₋₃)alkylamino-C₁₋₅ alkyl, mono- or di-(C₁₋₃alkyl)amino-S(O)₂, R₇-C₁₋₅ alkyl, R₈-C₁₋₅ alkoxy, R₉-C(O)-C₁₋₅ alkyl, R₁₀-C₁₋₅ alkyl(R₁₁)N, carboxy-mono- or di-(C₁₋₅)-alkyl-amino;

C_{1-3} alkyl or C_{1-4} alkoxy each being optionally partially or fully halogenated or optionally substituted with R_{17} ;

OR_{18} or C_{1-6} alkyl optionally substituted with OR_{18} ;

5

amino or mono- or di- (C_{1-5} alkyl)amino optionally substituted with R_{19} ;

$R_{20}C(O)N(R_{21})-$, $R_{22}O-$; $R_{23}R_{24}NC(O)-$; $R_{26}CH_2C(O)N(R_{21})-$ or $R_{26}C(O)CH_2N(R_{21})-$;
 C_{2-4} alkenyl substituted by $R_{23}R_{24}NC(O)-$; or

10

C_{2-4} alkynyl branched or unbranched carbon chain optionally partially or fully halogenated and optionally independently substituted with one to two oxo groups, pyrroldinyl, pyrrolyl, morpholinyl, piperidinyl, piperazinyl, imidazolyl, phenyl, pyridinyl, tetrazolyl or one or more C_{1-4} alkyl optionally substituted by one or more halogen atoms; and

15

R_{23} and R_{24} taken together optionally form imidazolyl, piperidinyl, morpholinyl, piperazinyl or a pyridinyl ring.

20 In yet another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:

G is phenyl, pyridinyl, pyridonyl, naphthyl, quinolinyl, isoquinolinyl, pyrazinyl, benzothiophenyl, dihydrobenzofuranyl, dihydrobenzothiophenyl, indanyl, indolyl, 25 indolinyl, indolonyl or indolinonyl, wherein G is substituted by one or more R_1 , R_2 or R_3 ;

Ar is naphthyl;

X is

30 phenyl, imidazolyl, pyridinyl, pyrimidinyl, piperdinyl, piperazinyl, pyridazinyl or pyrazinyl each being optionally independently substituted with one to three C_{1-4} alkyl, C_{1-4} alkoxy, hydroxy, nitrile, amino, mono- or di-(C_{1-3} alkyl)amino, mono- or di-(C_{1-3} alkylamino)carbonyl, $NH_2C(O)$, C_{1-6} alkyl-S(O)_m or halogen;

35 Y is:

a bond or

a C₁₋₄ saturated carbon chain wherein one of the carbon atoms is optionally replaced by O, N or S and wherein Y is optionally independently substituted with an oxo group;

Z is:

5 phenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, imidazolyl, dihydrothiazolyl, dihydrothiazolyl sulfoxide, pyranyl or pyrrolidinyl which are optionally substituted with one to two C₁₋₂ alkyl or C₁₋₂ alkoxy;

10 tetrahydropyranyl, morpholinyl, thiomorpholinyl, thiomorpholino sulfoxidyl, piperidinyl, piperidinonyl, piperazinyl or tetrahydropyrimidonyl which are optionally substituted with one to two C₁₋₂ alkyl or C₁₋₂ alkoxy; or

C₁₋₃ alkoxy;

15 each R₁ is independently:

C₃₋₅ alkyl optionally partially or fully halogenated, and optionally substituted with phenyl substituted with zero to three halogen, C₁₋₃ alkyl which is optionally partially or fully halogenated, hydroxy, nitrile or C₁₋₃alkoxy which is optionally partially or fully halogenated;

20 cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, bicyclopentanyl or bicyclohexanyl, each being optionally partially or fully halogenated and optionally substituted with one to three C₁₋₃ alkyl groups optionally partially or fully halogenated, CN, hydroxyC₁₋₃alkyl or phenyl; and an analog of cyclopropyl, cyclobutyl, cyclopentanyl, cyclohexanyl, bicyclopentanyl or bicyclohexanyl wherein one ring methylene group is replaced by O; and

25 silyl containing three C₁₋₂ independently alkyl groups optionally partially or fully halogenated;

30 each R₂ is independently:
bromo, chloro, fluoro, methoxy, methylsulfonyl or nitrile;

each R₃ is independently:
35 phenyl, morpholino, pyridinyl, pyrimidinyl, pyrrolylidinyl, 2,5-pyrrolidin-dionyl, imidazolyl, pyrazolyl, each of the aforementioned is optionally substituted with one to

three C₁₋₃ alkyl which is optionally partially or fully halogenated, halogen, oxo, hydroxy, nitrile and C₁₋₃ alkoxy optionally partially or fully halogenated;

5 C₁₋₃ alkyl or C₁₋₃ alkoxy each being optionally partially or fully halogenated or optionally substituted with R₁₇;

OR₁₈ or C₁₋₃ alkyl optionally substituted with OR₁₈;
amino or mono- or di-(C₁₋₃ alkyl)amino optionally substituted with R₁₉;

10 R₂₀C(O)N(R₂₁)-, R₂₂O- ; R₂₃R₂₄NC(O)-; R₂₆CH₂C(O)N(R₂₁)- or R₂₆C(O)CH₂N(R₂₁)-;

C₂₋₄ alkenyl substituted by R₂₃R₂₄NC(O)-; or

C₂₋₄ alkynyl substituted with pyrroldinyl or pyrrolyl;

15 and

R₂₃ and R₂₄ taken together optionally form morpholino.

In yet still another preferred embodiment the p38 kinase inhibitor is selected from the
20 compounds as immediately described above and wherein:

G is phenyl, pyridinyl, pyridonyl, naphthyl, quinolinyl, isoquinolinyl, dihydrobenzofuranyl, indanyl, indolinyl, indolonyl, or indolinonyl, wherein G is substituted by one or more R₁, R₂ or R₃;

25

Ar is 1-naphthyl;

X is:

30 phenyl, imidazolyl, pyridinyl, pyrimidinyl, piperdanyl, piperazinyl, pyridazinyl or pyrazinyl;

Y is:

a bond or

-CH₂-, -CH₂CH₂-, -C(O)-, -O-, -S-, -NH-CH₂CH₂CH₂-, -N(CH₃)-, or -NH-;

35

each R₁ is independently:

- C₃₋₅ alkyl optionally partially or fully halogenated, and optionally substituted with phenyl;
- 5 cyclopropyl, cyclopentanyl, cyclohexanyl and bicyclopentanyl optionally substituted with one to three methyl groups optionally partially or fully halogenated, CN, hydroxymethyl or phenyl; or 2-tetrahydrofuranyl substituted by methyl; or trimethyl silyl;
- each R₃ is independently:
- 10 phenyl, morpholinyl, pyridinyl, pyrimidinyl, pyrrolylidinyl, 2,5-pyrrolidin-dionyl, imidazolyl or pyrazolyl, wherein any of the aforementioned is optionally substituted with C₁₋₂ alkyl which is optionally partially or fully halogenated;
- 15 C₁₋₃ alkyl or C₁₋₃ alkoxy each being optionally partially or fully halogenated or optionally substituted with diethylamino;
- OR₁₈ or C₁₋₃ alkyl optionally substituted with OR₁₈;
- amino or mono- or di-(C₁₋₃ alkyl)amino optionally substituted with R₁₉;
- 20 CH₃C(O)NH-, R₂₂O- ; R₂₃R₂₄NC(O)-; R₂₆CH₂C(O)N(R₂₁)- or R₂₆C(O)CH₂N(R₂₁)-;
- C₂₋₄alkenyl substituted by R₂₃R₂₄NC(O)-; or
- 25 C₂₋₄ alkynyl substituted with pyrroldinyl or pyrrolyl;
- R₂₃ and R₂₄ are H or R₂₃ and R₂₄ taken together optionally form morpholino; and R₂₆ is morpholino.
- 30 In a further embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein:
G is
phenyl, pyridinyl or naphthyl wherein G is substituted by one or more R₁, R₂ or R₃;
- 35 X is:
imidazolyl or pyridinyl;

Y is:

-CH₂-, -NH-CH₂CH₂CH₂- or -NH-;

Z is morpholino;

5

each R₁ is independently:

tert-butyl, sec-butyl, tert-amyl or phenyl;

R₂ is chloro;

10

R₃ is independently:

methyl, methoxy, methoxymethyl, hydroxypropyl, acetamide, morpholino or morpholinocarbonyl.

- 15 In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein X is pyridinyl.

In another preferred embodiment the p38 kinase inhibitor is selected from the compounds as immediately described above and wherein the pyridinyl is attached to Ar via the 3-pyridinyl position.

20

The following compounds are preferred compounds of the p38 kinase inhibitors which can be used in the methods described herein:

25 1-(3-Cyano-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Fluoro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

30 1-(4-Chloro-2-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

naphthalen-1-yl]-urea

1-(2-Chloro-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

35 1-(3,4-Dimethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Iodo-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-m-tolyl-urea

1-(4-Methylsulfanyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
5 urea

1-(3-Chloro-4-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

10 1-(4-Chloro-3-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

1-(2,5-Dichloro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-naphthalen-2-yl-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-phenyl-urea

1-(3-Chloro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

20 1-(4-Chloro-3-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-
naphthalen-1-yl]-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(2,4,6-trichloro-phenyl)-urea

25 1-(2-Methyl-3-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

30 1-(4-Methyl-2-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

1-(2,3-Dichloro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

35 1-(2-Methoxy-5-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-
yl]-urea

1-(2-Chloro-6-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2,4-Dichloro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

5

1-(4-Methyl-3-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2,4-Dimethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

10

1-(2,3-Dimethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(4-Cyano-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3,4,5-trimethoxy-phenyl)-urea

1-Biphenyl-4-yl-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

20

1-(2,5-Difluoro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Chloro-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

25

1-(2-Fluoro-3-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(4-Benzyl-oxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

30

1-(2-Methylsulfanyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2-Fluoro-6-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

35

1-(4-Fluoro-3-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(2,4,5-trimethyl-phenyl)-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-trifluoromethyl-phenyl)-
5 urea

1-(3-Methylsulfanyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

10 1-(2-Methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2-Fluoro-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-
naphthalen-1-yl]-urea

15 1-(4-Methoxy-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-
yl]-urea

1-(2-Fluoro-5-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

20 1-(4-Ethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2,5-Dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

25 1-(4,5-Dimethyl-2-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-
yl]-urea

1-(5-Chloro-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-
urea

30 1-(2-Isopropyl-6-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-
yl]-urea

1-(2-Difluoromethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

35 urea

1-(4-Isopropyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(4-Methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Ethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

5

1-(2-Ethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(4-Butoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

10 4-{3-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-benzoic acid ethyl ester

1-(4-Butyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15

1-(2,6-Dibromo-4-isopropyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

20

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-trifluoromethylsulfanyl-phenyl)-urea

5-{3-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-isophthalic acid

25 dimethyl ester

1-(3-Cyclopentyloxy-4-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

30 3-{3-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-benzoic acid ethyl ester

1-(5-tert-Butyl-2-hydroxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

35

1-(2-Hydroxymethyl-4-phenyl-cyclohexyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2-Methylsulfanyl-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

- 5 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-pentyloxy-biphenyl-3-yl)-urea

4-Methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-benzoic acid methyl ester

10

1-(2,5-Diethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-Benzothiazol-6-yl-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15

N-(2,5-Diethoxy-4-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-benzamide

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-phenoxy-phenyl)-urea

20

1-(5-Ethanesulfonyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

4-Methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-N-phenyl-benzamide

25

1-(2-Methyl-1,3-dioxo-2,3-dihydro-1H-isoindol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2,3-Dimethyl-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

30 urea

N-Butyl-4-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-benzenesulfonamide

35

1-[3-(2-Methyl-[1,3]dioxolan-2-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-Methoxy-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2,4-Dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

5

1-(2-Methyl-4-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(2-Methoxy-4-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

10 urea

1-(4-Chloro-2-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15 1-(5-Chloro-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3,5-Dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

20 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-trifluoromethoxy-phenyl)-urea

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-trifluoromethylsulfanyl-phenyl)-urea

25

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(2-phenoxy-phenyl)-urea

1-(2-Methoxy-5-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

30

1-(5-Chloro-2,4-dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3,5-Bis-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-

35 yl]-urea

1-(2-tert-Butyl-5-methyl-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

5 1-(3-Methyl-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(3-tert-Butyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

10 1-(4-Methyl-biphenyl-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(4-tert-Butyl-biphenyl-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15 1-(5-Chloro-2,4-dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-

15 1-yl]-urea

1-(5-Isopropyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

20 1-(5-sec-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(5-tert-Butyl-2-methoxy-3-propyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

25

1-(5-tert-Butyl-2-methoxymethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-

30 1-yl]-urea

1-(5-tert-Butyl-2-methyl-phenyl)-3-(4-{6-[(3-methoxy-propyl)-methyl-amino]-pyridin-3-yl}-naphthalen-1-yl)-urea

35 1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(4-morpholin-4-ylmethyl-imidazol-1-yl)-naphthalen-1-yl]-urea

1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

5 1-(5-tert-Butyl-2-methyl-phenyl)-3-{4-[6-(3-methoxy-propylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea

1-(5-tert-Butyl-2-methyl-pyridin-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

10 1-(5-tert-Butyl-2-morpholin-4-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-(6-tert-Butyl-2-chloro-3-methyl-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

15 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-trifluoromethyl-phenyl)-urea

20 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-trifluoromethoxy-phenyl)-urea

25 1-[5-(1,1-Dimethyl-propyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

30 1-[5-tert-Butyl-2-(1H-pyrazol-4-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

35 1-[5-tert-Butyl-2-(2-methyl-pyrimidin-5-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

40 1-[5-tert-Butyl-2-(3-hydroxy-propyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

45 1-[5-tert-Butyl-2-(3-morpholin-4-yl-3-oxo-propyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

1-[5-tert-Butyl-2-(morpholine-4-carbonyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-acetamide

1-(2-tert-Butyl-5-methyl-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-(3-Methyl-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(3-tert-Butyl-phenyl)-3-[4-(4-morpholin-4-ylmethyl-phenyl)-naphthalen-1-yl]-urea;

15 1-(3-tert-Butyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(4-Methyl-biphenyl-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-(4-tert-Butyl-biphenyl-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-Chloro-2,4-dimethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-(5-Isopropyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-(5-sec-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-3-propyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(5-tert-Butyl-2-methoxymethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(4-thiomorpholin-4-ylmethyl-phenyl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-phenyl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[4-(tetrahydro-pyran-4-ylamino)-phenyl]-naphthalen-1-yl}-urea;

15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(4-methyl-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

20 1-(5-tert-Butyl-2-methyl-phenyl)-3-(4-{6-[(3-methoxy-propyl)-methyl-amino]-pyridin-3-yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(4-morpholin-4-ylmethyl-imidazol-1-yl)-naphthalen-1-yl]-urea;

25 1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(4-morpholin-4-ylmethyl-phenyl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-(5-tert-Butyl-2-methyl-phenyl)-3-{4-[6-(3-methoxy-propylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

35 1-(5-tert-Butyl-2-methyl-pyridin-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-morpholin-4-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-2-chloro-3-methyl-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-2-chloro-3-methyl-pyridin-4-yl)-3-[4-(6-thiomorpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-[2-Methoxy-5-(1-methyl-cyclopropyl)-phenyl]-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-yl)-naphthalen-1-yl]-urea;

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-trifluoromethyl-phenyl)-urea;

15 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(4-trifluoromethoxy-phenyl)-urea;

1-[5-(1,1-Dimethyl-propyl)-2-methoxy-phenyl]-3-[4-(4-thiomorpholin-4-ylmethyl-phenyl)-

20 naphthalen-1-yl]-urea;

1-[5-(1,1-Dimethyl-propyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-[5-(1-Cyano-cyclopropyl)-2-methoxy-phenyl]-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(1H-pyrazol-4-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-[5-tert-Butyl-2-(2-methyl-pyrimidin-5-yl)-phenyl]-3-[4-(5-pyridin-4-ylmethyl-pyridin-2-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(2-methyl-pyrimidin-5-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-

35 yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(3-hydroxy-propyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(3-morpholin-4-yl-3-oxo-propyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(morpholine-4-carbonyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 2-[4-tert-Butyl-2-(3-{4-[6-(2,6-dimethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-ureido)-phenoxy]-acetamide;

3-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-benzamide;

15 4-tert-Butyl-2-{3-[4-(2-chloro-4-morpholin-4-ylmethyl-phenyl)-naphthalen-1-yl]-ureido}-benzamide;

and the pharmaceutically acceptable derivatives thereof.

20 The following compounds are more preferred compounds of the p38 kinase inhibitors which can be used in the methods described herein:

1-(2-tert-Butyl-5-methyl-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

25 naphthalen-1-yl]-urea;

1-(3-tert-Butyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(4-Methyl-biphenyl-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

30 urea;

1-(4-tert-Butyl-biphenyl-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(5-Isopropyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

- 1-(5-sec-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 1-(5-tert-Butyl-2-methoxymethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 10 1-(5-tert-Butyl-2-methyl-phenyl)-3-(4-{6-[(3-methoxy-propyl)-methyl-amino]-pyridin-3-yl}-naphthalen-1-yl)-urea;
- 1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 15 1-(5-tert-Butyl-2-methyl-pyridin-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 20 1-[5-(1,1-Dimethyl-propyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 1-[5-tert-Butyl-2-(1H-pyrazol-4-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 25 1-[5-tert-Butyl-2-(2-methyl-pyrimidin-5-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 1-[5-tert-Butyl-2-(3-hydroxy-propyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 30 1-[5-tert-Butyl-2-(morpholine-4-carbonyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;
- 35 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-acetamide

and the pharmaceutically acceptable derivatives thereof.

The following compounds are more preferred compounds of the p38 kinase inhibitors which can be used in the methods described herein:

5

1-(4-tert-Butyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methyl-phenyl)-3-[4-(4-morpholin-4-ylmethyl-piperidin-1-yl)-naphthalen-1-yl]-urea;

10

1-(6-Chloro-4-trifluoromethyl-pyridin-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(4-Difluoromethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

15

urea;

1-(3-Methyl-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-[2-Methoxy-5-(1-methyl-1-phenyl-ethyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

(5-tert-Butyl-2-methyl-phenyl)-carbamic acid 3-(5-{4-[3-(5-tert-butyl-2-methyl-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylamino)-propyl ester;

25

1-(6-tert-Butyl-benzo[1,3]dioxol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

ureido}-phenyl)-acetamide;

1,3-Bis-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-[5-tert-Butyl-3-(2,2-dimethyl-[1,3]dioxolan-4-ylmethyl)-2-hydroxy-phenyl]-3-[4-(6-

morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(2-pyrrolidin-1-yl-ethoxy)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-

yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-3-(2,3-dihydroxy-propyl)-2-hydroxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5

1-(2,3-Dimethyl-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(2-p-tolyloxy-5-

10 trifluoromethyl-phenyl)-urea;

1-[2-(2-Methoxy-phenoxy)-5-trifluoromethyl-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-naphthalen-1-yl-urea;

1-{5-tert-Butyl-2-methyl-3-[3-(tetrahydro-pyran-2-yloxy)-prop-1-ynyl]-phenyl}-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-{5-tert-Butyl-2-[3-(tetrahydro-pyran-2-yloxy)-prop-1-ynyl]-phenyl}-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-Hydroxymethyl-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25

1-(2-Methoxy-dibenzofuran-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(2,5-Di-tert-butyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

30 urea;

1-[3-(4-Bromo-1-methyl-1H-pyrazol-3-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(3-Hydroxy-5,6,7,8-tetrahydro-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(1-Acetyl-2,3-dihydro-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-oxazol-5-yl-phenyl)-urea;

5

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-[1,3,4]oxadiazol-2-yl-phenyl)-urea;

1-(2-Methoxy-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

10 naphthalen-1-yl]-urea;

Furan-2-carboxylic acid (4-tert-butyl-2-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-amide;

15 1-(2-Methoxy-4-phenylamino-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-Methoxy-2-methyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20

1-(3-Hydroxy-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N,N-Diethyl-4-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

25 ureido}-benzenesulfonamide;

1-(2,2-Difluoro-benzo[1,3]dioxol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-[5-(1,1-Dimethyl-propyl)-2-phenoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-(2,2-Dimethyl-propionyl)-2-methyl-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35

2-Chloro-5-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-benzoic acid isopropyl ester;

1-(4-Amino-3,5-dibromo-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5 1-[5-tert-Butyl-3-(3-hydroxy-prop-1-ynyl)-2-methyl-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(3-hydroxy-prop-1-ynyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10

1-[5-tert-Butyl-3-(2,2-dimethyl-[1,3]dioxolan-4-ylmethyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-3-(2,3-dihydroxy-propyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-

15 pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butoxy-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-[5-(1-Cyano-cyclopropyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-3-(2-diethylamino-ethyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-[1,3]dioxolan-2-yl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-pyrrolidin-1-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

30 naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-dimethylamino-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(5-tert-Butyl-2-propoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-hydroxymethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

2-(5-tert-Butyl-2-methoxy-phenyl)-N-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-acetamide;

10 1-(2-Methoxy-5-phenoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-(3,3-Dimethyl-2-oxo-2,3-dihydro-1H-indol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-cyclopentyloxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(3-pyridin-3-yl-pyrrolidin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-Cyclohexyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-(2,4-Dimethoxy-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-(5-tert-Butyl-2-methoxy-3-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(3-Amino-5-tert-butyl-2-methoxy-phenyl)-3-[4-(6-methyl-pyridin-3-yl)-naphthalen-1-yl]-

35 urea;

N-Acetyl-N-(5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

naphthalen-1-yl]-ureido}-phenyl)-acetamide;

1-(6-tert-Butyl-4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-8-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5

1-[6-tert-Butyl-4-(2-morpholin-4-yl-ethyl)-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-8-yl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-ethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-

10 yl]-urea;

1-(5-tert-Butyl-2-isopropoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-(5-tert-Butyl-2-imidazol-1-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-tert-Butyl-2-methoxy-4-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-methanesulfonamide;

20

1-(5-tert-Butyl-3-ethylamino-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

25 ureido}-phenyl)-bis(methanesulfon)amide;

1-[5-tert-Butyl-2-(1-methyl-1H-pyrazol-4-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-(2-Methanesulfinyl-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(2-Ethanesulfonyl-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35

1-[4-(6-{{Bis-(2-methoxy-ethyl)-amino]-methyl}-pyridin-3-yl)-naphthalen-1-yl]-3-(5-tert-butyl-2-methoxy-phenyl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(3-dimethylamino-pyrrolidin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

- 5 N-[1-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-pyrrolidin-3-yl]-acetamide;

1-(1-Acetyl-3,3-dimethyl-2,3-dihydro-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-propionamide;

1-(5-tert-Butyl-2-methyl-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

15 naphthalen-1-yl]-urea;

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-trifluoromethanesulfonyl-phenyl)-urea;

20 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-isobutyramide;

2-(4-tert-Butyl-2-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenoxy)-acetamide;

25

1-(5-tert-Butyl-2-oxo-2,3-dihydro-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-3-cyano-2-methoxymethoxy-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-

30 pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-3-cyano-2-hydroxy-pyridin-4-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(5-tert-Butyl-3-cyano-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(1,3,3-trimethyl-2,3-dihydro-1H-indol-5-yl)-urea;

5 1-(5-tert-Butyl-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-benzenesulfonamide;

10 Ethanesulfonic acid (5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-amide;

15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(4-morpholin-4-ylmethyl-piperidin-1-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(1-methyl-1H-pyrazol-4-yl)-phenyl]-3-[4-(4-morpholin-4-ylmethyl-piperidin-1-yl)-naphthalen-1-yl]-urea;

20 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methylsulfanyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-(5-tert-Butyl-2-methoxy-pyridin-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

2,2,2-Trifluoro-ethanesulfonic acid (5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-amide;

30 N-(5-{4-[3-(5-tert-Butyl-2-methyl-phenyl)-ureido]-naphthalen-1-yl}-pyrazin-2-yl)-methanesulfonamide;

35 1-[4-(6-{{Bis-(2-cyano-ethyl)-amino}-methyl}-pyridin-3-yl)-naphthalen-1-yl]-3-(5-tert-butyl-2-methoxy-phenyl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(4-methyl-piperazin-1-ylmethyl)-pyridin-3-yl]-

naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-thiomorpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-piperidin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(1-oxo-tetrahydro-thiopyran-4-ylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

10 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(tetrahydro-pyran-4-ylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-{{(2-cyano-ethyl)-(tetrahydro-furan-2-ylmethyl)}-amino}-methyl)-pyridin-3-yl]-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-methoxymethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

20

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(2-morpholin-4-yl-ethylamino)-methyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-methyl-3-oxo-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

25 1-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-piperidine-3-carboxylic acid amide;

30

1-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-piperidine-4-carboxylic acid amide;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(1-oxo-1*H*-thiomorpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

35

1-(3,3-Dimethyl-2-oxo-2,3-dihydro-1*H*-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(3-oxo-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

- 5 1-{4-[6-(4-Acetyl-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-3-(5-tert-butyl-2-methoxy-phenyl)-urea;

4-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-piperazine-1-carboxylic acid ethyl ester;

10

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(2-pyridin-3-yl-ethylamino)-methyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(tetrahydro-furan-3-ylamino)-methyl]-pyridin-3-

15 yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-{[(2-cyano-ethyl)-pyridin-3-ylmethyl-amino]-methyl}-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(2-methylsulfanyl-ethylamino)-methyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-oxa-5-aza-bicyclo[2.2.1]hept-5-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

25

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(2-piperazin-1-yl-ethylamino)-methyl]-pyridin-3-

30 yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(4-pyrimidin-2-yl-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

35 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(4-pyridin-2-yl-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[4-(3-methoxy-phenyl)-piperazin-1-ylmethyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

- 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(morpholine-4-carbonyl)-pyridin-3-yl]-
5 naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-thia-5-aza-bicyclo[2.2.1]hept-5-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

- 10 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(5-morpholin-4-ylmethyl-pyrazin-2-yl)-naphthalen-1-yl]-urea;

1-(6-tert-Butyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-8-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

- 15 1-(3-Amino-5-tert-butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-yl)-

- 20 acetamide;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-N-methyl-acetamide;

- 25 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-2,2,2-trifluoro-acetamide;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(pyridin-3-yloxy)-pyridin-3-yl]-naphthalen-1-yl}-urea;

- 30 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(pyridin-3-ylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-carbamic acid 3-tert-butyl-phenyl

- 35 ester;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

ureido}-phenyl)-methanesulfonamide and

and the pharmaceutically acceptable derivatives thereof.

- 5 The following compounds are more preferred compounds of the p38 kinase inhibitors which can be used in the methods described herein:

1-(3-Methyl-naphthalen-2-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-acetamide;

1-[5-tert-Butyl-3-(2,3-dihydroxy-propyl)-2-hydroxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-

15 pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(2,3-Dimethyl-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20 1-{5-tert-Butyl-2-methyl-3-[3-(tetrahydro-pyran-2-yloxy)-prop-1-ynyl]-phenyl}-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(2-Methoxy-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25

1-[5-(2,2-Dimethyl-propionyl)-2-methyl-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-3-(3-hydroxy-prop-1-ynyl)-2-methyl-phenyl]-3-[4-(6-morpholin-4-ylmethyl-

30 pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-2-(3-hydroxy-prop-1-ynyl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-[5-tert-Butyl-3-(2,2-dimethyl-[1,3]dioxolan-4-ylmethyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[5-tert-Butyl-3-(2,3-dihydroxy-propyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butoxy-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-5-1-yl]-urea;

1-[5-(1-Cyano-cyclopropyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-[5-tert-Butyl-3-(2-diethylamino-ethyl)-2-methoxy-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-[1,3]dioxolan-2-yl-pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-(5-tert-Butyl-2-pyrrolidin-1-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-dimethylamino-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

20 naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-propoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-hydroxymethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

30 1-(5-Cyclohexyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(2,4-Dimethoxy-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

35 naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-3-nitro-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-

naphthalen-1-yl]-urea;

1-(3-Amino-5-tert-butyl-2-methoxy-phenyl)-3-[4-(6-methyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

5

N-Acetyl-N-(5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-acetamide;

1-(6-tert-Butyl-4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-8-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10 1-(5-tert-Butyl-2-ethoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

15 1-(5-tert-Butyl-2-isopropoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-imidazol-1-yl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

20

1-(5-tert-Butyl-3-ethylamino-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

25 ureido}-phenyl)-bis(methanesulfon)amide;

1-[5-tert-Butyl-2-(1-methyl-1H-pyrazol-4-yl)-phenyl]-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

30 1-(2-Methanesulfinyl-5-trifluoromethyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-[4-(6-{{Bis-(2-methoxy-ethyl)-amino}-methyl}-pyridin-3-yl)-naphthalen-1-yl]-3-(5-tert-butyl-2-methoxy-phenyl)-urea;

35

N-[1-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-pyrrolidin-3-yl]-acetamide;

1-(1-Acetyl-3,3-dimethyl-2,3-dihydro-1H-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

- 5 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-propionamide;

1-(5-tert-Butyl-2-methyl-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

10

1-[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-3-(3-trifluoromethanesulfonyl-phenyl)-urea;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

15 ureido}-phenyl)-isobutyramide;

2-(4-tert-Butyl-2-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenoxy)-acetamide;

20 1-(5-tert-Butyl-2-oxo-2,3-dihydro-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-3-cyano-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

25

1-(5-tert-Butyl-benzooxazol-7-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-

30 ureido}-phenyl)-benzenesulfonamide;

Ethanesulfonic acid (5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-amide;

35 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(2-morpholin-4-ylmethyl-pyrimidin-5-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methylsulfanyl-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-pyridin-3-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

2,2,2-Trifluoro-ethanesulfonic acid (5-tert-butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-amide;

10 N-(5-{4-[3-(5-tert-Butyl-2-methyl-phenyl)-ureido]-naphthalen-1-yl}-pyrazin-2-yl)-methanesulfonamide;

1-[4-(6-{[Bis-(2-cyano-ethyl)-amino]-methyl}-pyridin-3-yl)-naphthalen-1-yl]-3-(5-tert-butyl-2-methoxy-phenyl)-urea;

15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(4-methyl-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

20 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-thiomorpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-piperidin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

25 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(1-oxo-tetrahydro-thiopyran-4-ylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(tetrahydro-pyran-4-ylamino)-pyridin-3-yl]-naphthalen-1-yl}-urea;

30 1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-{{(2-cyano-ethyl)-(tetrahydro-furan-2-ylmethyl)-amino]-methyl}-pyridin-3-yl)-naphthalen-1-yl]-urea;

35 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-methoxymethyl-morpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-methyl-3-oxo-piperazin-1-ylmethyl)-pyridin-3-

yl]-naphthalen-1-yl}-urea;

1-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-ylmethyl)-piperidine-3-carboxylic acid amide;

5

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(1-oxo-1*H*-thiomorpholin-4-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(3,3-Dimethyl-2-oxo-2,3-dihydro-1*H*-indol-5-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-

10 yl]-naphthalen-1-yl]-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(3-oxo-piperazin-1-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[(tetrahydro-furan-3-ylamino)-methyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(6-{{(2-cyano-ethyl)-pyridin-3-ylmethyl-amino}-methyl}-pyridin-3-yl)-naphthalen-1-yl]-urea;

20

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2-oxa-5-aza-bicyclo[2.2.1]hept-5-ylmethyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(2,6-dimethyl-morpholin-4-ylmethyl)-pyridin-3-

25 yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-(4-{6-[4-(3-methoxy-phenyl)-piperazin-1-ylmethyl]-pyridin-3-yl}-naphthalen-1-yl)-urea;

30 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(morpholine-4-carbonyl)-pyridin-3-yl]-naphthalen-1-yl}-urea;

1-(5-tert-Butyl-2-methoxy-phenyl)-3-[4-(5-morpholin-4-ylmethyl-pyrazin-2-yl)-naphthalen-1-yl]-urea;

35

1-(6-tert-Butyl-3-oxo-3,4-dihydro-2*H*-benzo[1,4]oxazin-8-yl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

1-(3-Amino-5-tert-butyl-2-methoxy-phenyl)-3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-urea;

- 5 N-(5-{4-[3-(5-tert-Butyl-2-methoxy-phenyl)-ureido]-naphthalen-1-yl}-pyridin-2-yl)-acetamide;

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-N-methyl-acetamide;

10

N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-2,2,2-trifluoro-acetamide;

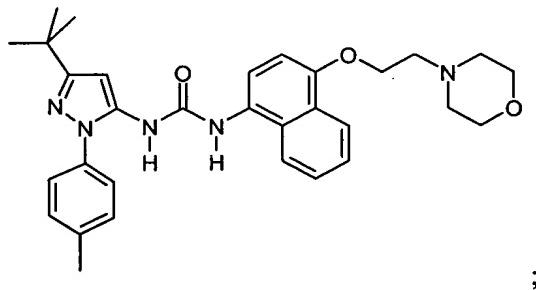
15 1-(5-tert-Butyl-2-methoxy-phenyl)-3-{4-[6-(pyridin-3-yloxy)-pyridin-3-yl]-naphthalen-1-yl}-urea;

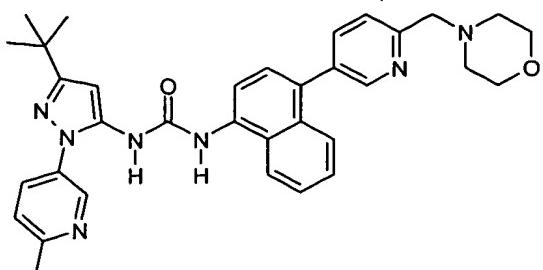
[4-(6-Morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-carbamic acid 3-tert-butyl-phenyl ester;

20 N-(5-tert-Butyl-2-methoxy-3-{3-[4-(6-morpholin-4-ylmethyl-pyridin-3-yl)-naphthalen-1-yl]-ureido}-phenyl)-methanesulfonamide and

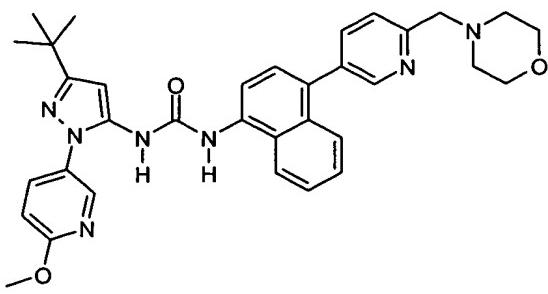
and the pharmaceutically acceptable derivatives thereof.

25 More preferred, the p38 kinase inhibitors are:



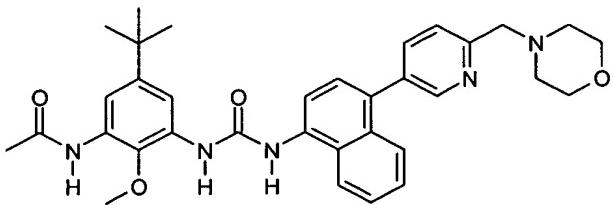


;

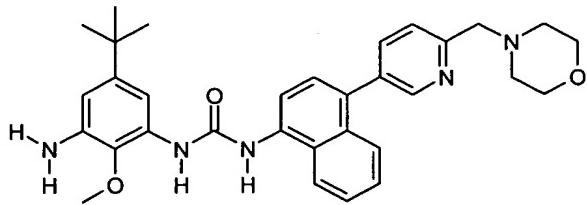


;

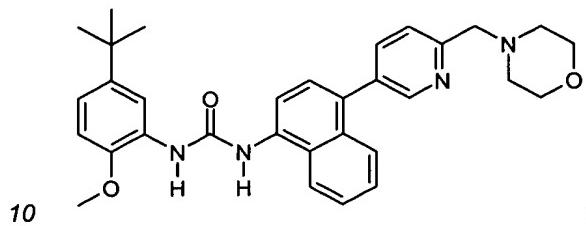
5



;

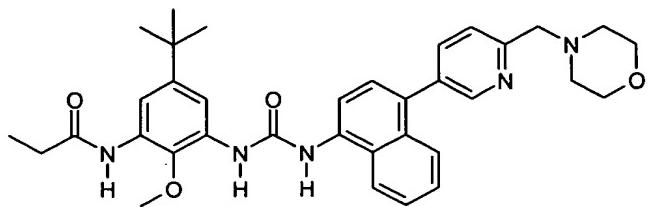


;

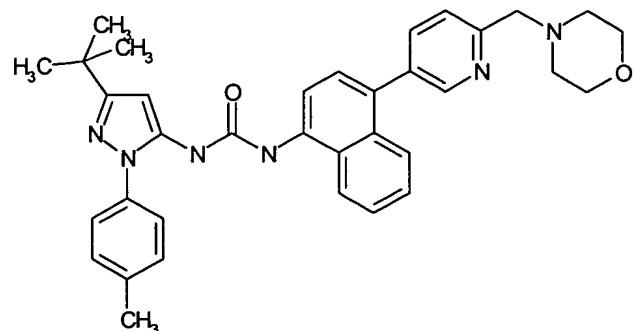


;

10



and

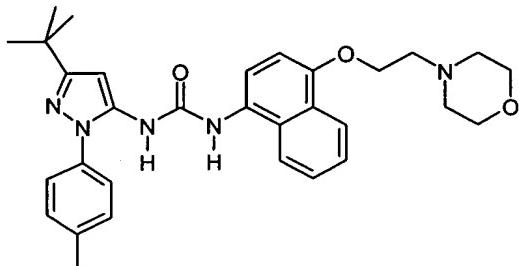


5

or the pharmaceutically acceptable salts thereof.

Particularly preferred, the p38 kinase inhibitors is:

10



Formula (III).

and the pharmaceutically acceptable derivatives thereof.

- 15 Any reference to the abovementioned p38 kinase inhibitors include "pharmaceutically acceptable derivative" thereof which refers to any pharmaceutically acceptable salt or ester of a compound of this invention, or any other compound which, upon administration to a patient, is capable of providing (directly or indirectly) a p38 kinase inhibitor of this invention, a pharmacologically active metabolite or pharmacologically active residue thereof. A

pharmacologically active metabolite shall be understood to mean any compound capable of being metabolized enzymatically or chemically. This includes, for example, hydroxylated or oxidized derivative p 38 compounds.

- 5 Pharmaceutically acceptable salts of the compounds of this invention include those derived from pharmaceutically acceptable inorganic and organic acids and bases. Examples of suitable acids include hydrochloric, hydrobromic, sulfuric, nitric, perchloric, fumaric, maleic, phosphoric, glycolic, lactic, salicylic, succinic, toluene-p-sulfuric, tartaric, acetic, citric, methanesulfonic, formic, benzoic, malonic, naphthalene-2-sulfuric and benzenesulfonic acids.
- 10 Other acids, such as oxalic acid, while not themselves pharmaceutically acceptable, may be employed in the preparation of salts useful as intermediates in obtaining the compounds of this invention and their pharmaceutically acceptable acid addition salts. Salts derived from appropriate bases include alkali metal (*e.g.*, sodium), alkaline earth metal (*e.g.*, magnesium), ammonium and N-(C₁-C₄ alkyl)₄⁺ salts.

15

In addition, the compounds of this invention include prodrugs of p38 compounds. Prodrugs include those compounds that, upon simple chemical transformation, are modified to produce compounds of the invention. Simple chemical transformations include hydrolysis, oxidation and reduction. Specifically, when a prodrug of this invention is administered to a patient, the 20 prodrug may be transformed into a p38 kinase inhibitor compound thereby imparting the desired pharmacological effect.

For prophylactic or therapeutic use, the pharmaceutical p38 kinase inhibitor compounds according to the invention may be administered in any conventional dosage form in any

- 25 conventional manner. Routes of administration include, but are not limited to, intravenously, intramuscularly, subcutaneously, intrasynovially, by infusion, sublingually, transdermally, orally, topically or by inhalation. The preferred modes of administration are oral and intravenous.

- 30 p38 kinase inhibitors according to the invention may be administered separately, or in a combination formulation with adjuvants that enhance stability of the inhibitors, facilitate administration of pharmaceutical compositions containing them in certain embodiments,

- provide increased dissolution or dispersion, increase inhibitory activity, provide adjunct therapy, and the like, including other active ingredients. For combination therapy with the drugs listed hereinbelow, advantageously, such combination therapies utilize lower dosages of the conventional therapeutics, thus avoiding possible toxicity and adverse side effects incurred
- 5 when those agents are used as monotherapies. p38 kinase inhibitors may therefore be physically combined with the conventional therapeutics or other adjuvants into a single pharmaceutical composition. Regarding pharmaceutical compositions, reference may be made to Cappola et al.: US patent application no. 09/902,822, PCT/US 01/21860 and US provisional application no. 60/313,527, each incorporated by reference herein in their entirety.
- 10 The optimum percentage (w/w) of a compound of the invention may vary and is within the purview of those skilled in the art.

As mentioned above, dosage forms of the compositions described herein include pharmaceutically acceptable carriers and adjuvants known to those of ordinary skill in the art.

- 15 These carriers and adjuvants include, for example, ion exchangers, alumina, aluminum stearate, lecithin, serum proteins, buffer substances, water, salts or electrolytes and cellulose-based substances. Preferred dosage forms include, tablet, capsule, caplet, liquid, solution, suspension, emulsion, lozenges, syrup, reconstitutable powder, granule, suppository and transdermal patch. Methods for preparing such dosage forms are known (see, for example,
- 20 H.C. Ansel and N.G. Popovish, *Pharmaceutical Dosage Forms and Drug Delivery Systems*, 5th ed., Lea and Febiger (1990)). Dosage levels and requirements are well-recognized in the art and may be selected by those of ordinary skill in the art from available methods and techniques suitable for a particular patient. p38 kinase inhibitor, in some embodiments, dosage levels range from about 1-1000 mg/dose for a 70 kg patient. Although one dose per
- 25 day may be sufficient, up to 5 doses per day may be given. For oral doses, up to 2000 mg/day may be required. Reference in this regard may also be made to US provisional application no. 60/339,249. As the skilled artisan will appreciate, lower or higher doses may be required depending on particular factors. For instance, specific dosage and treatment regimens will depend on factors such as the patient's general health profile, the severity and course of the
- 30 patient's disorder or disposition thereto, and the judgment of the treating physician.

In another aspect the present invention relates to a pharmaceutical composition suitable for inhalation which contains one or more salts of a p38 kinase inhibitor, optionally in the form of their solvates or hydrates. The active substances may either be combined in a single preparation or contained in two separate formulations. Pharmaceutical compositions which

5 contain the active p38 kinase inhibitor substances in a single preparation are preferred according to the invention.

Anticoagulant and Fibrinolytic Activity of P38 MAP Kinase Inhibitors

10 It has been found for the first time that p38 MAPK has a role in activation of coagulation, fibrinolysis and the vascular endothelium. The invention therefore provides a method of anticoagulant and fibrinolytic therapy for a disease or condition relating to blood coagulation or fibrinolysis comprising administering to a patient in need thereof a pharmaceutically effective amount of a p38 MAP kinase inhibitor.

15

p38 MAP Kinase has been determined to have a role in the activation of the hemostatic mechanism *in vivo*. A possible explanation for the anticoagulant effect of p38 MAP kinase inhibitors is inhibition of tissue factor expression. Tissue factor is essential for activation of the coagulation system in this model of low grade endotoxemia^{3,6}, and p38 MAPK inhibition 20 markedly diminished LPS-induced tissue factor expression by monocytic cells *in vitro*⁹. Moreover, p38 MAPK activation also mediates tissue factor expression by endothelial cells stimulated with thrombin or vascular endothelial growth factor, and by vascular smooth muscle cells stimulated with thrombin¹⁰⁻¹². Furthermore, and not mutually exclusive, the reduced IL-6 concentrations in subjects treated with a preferred p38 MAP kinase inhibitor of 25 the formula (III) may have contributed to the attenuated coagulant response, considering that IL-6 is an important mediator of coagulation activation by LPS *in vivo*¹⁶.

Intravenous injection of LPS is associated with activation of the coagulation system, as reflected by a rise in the plasma concentrations of the prothrombin fragment F1+2. The 30 effective dosage range for formula (III) is described in US provisional application 60/339,249. High end dosing of formula (III) inhibited LPS-induced coagulation activation, both delaying and diminishing the increase in plasma F1+2 concentrations. Formula (III) had an even stronger inhibitory effect on activation of the fibrinolytic system

p38 MAP kinase inhibitors also have an effect on endothelial cell activation, reflected by the plasma concentrations of sE-selectin and vWF¹⁸⁻²⁰. Administration of LPS elicited profound increases in the plasma levels of sE-selectin and vWF, which were attenuated by high dose 5 formula (III). p38 MAPK may play a direct role in signaling inflammatory effects into the interior of the vascular endothelium^{10,11,21}, including the expression of E-selectin on stimulated endothelial cells^{22,23}.

10

Methods of Therapeutic Use

p38 compounds have been discovered for the first time to be useful in anticoagulant and fibrinolytic or thrombolytic therapy. Anticoagulants are used in treating acute venous thrombosis and pulmonary embolism. Thrombosis can also occur if the form of cerebral 15 arterial embolism from cardiac sources such as ventricular mural thrombi or atrial thrombi or from an atherosclerotic, partially stenosed carotid or vertebral artery, or peripheral or mesenteric arterial thrombosis.

These agents may also be useful in preventing or treating thrombosis during pregnancy, hemorrhagic skin necrosis, preventing or treating acute or chronic disseminated intravascular 20 coagulation (DIC), prevention of clot formation occurring from surgery, long bed rest or long periods of immobilization such as that which occurs during air travel.

An example of a condition where an inhibitor of coagulation would be useful prophylactically is in the prevention or treatment of deep vein thrombosis (DVT). Current therapy involves 25 anticoagulation with heparin. Venous thrombosis or thrombophlebitis is caused by the presence of thrombus within a superficial or deep vein and the accompanying inflammatory response in the vessel wall. The factors that predispose to venous thrombosis include stasis, vascular damage, and hypercoagulability and may occur in patients having orthopedic surgical procedures, particularly those involving the hip or knee, or patients who undergo abdominal 30 or thoracic operations. The prevalence of venous thrombosis is particularly high in patients

with cancer of the pancreas, lungs, genitourinary tract, stomach, and breast. Risk of thrombosis is increased following trauma, such as fractures of the spine, pelvis, femur, and tibia. Immobilization, regardless of the underlying disease, is a major predisposing cause of venous thrombosis.

5

An example of a disease where an agent that inhibits the fibrinolytic pathway would be useful is fulminant meningococcemia. Fulminant meningococcemia is perhaps the most rapidly lethal form of septic shock. Fibrinolytic therapy may also be an available treatment for patients with massive pulmonary embolism and systemic hypotension and to restore the

10 patency of acutely occluded peripheral and coronary arteries. Timely fibrinolytic therapy may reduce both myocardial damage and mortality following acute coronary occlusion.

Fibrinolytic therapy may also be effective in acute thrombotic strokes, acute coronary occlusion, acute peripheral arterial occlusion, massive pulmonary embolism with severe hypoxemia and hypotension, axillary vein thrombosis, massive iliofemoral vein thrombosis,

15 occluded arterial or venous cannulae, cardiomyopathy, and venoocclusive disease of the liver.

Also with the scope of the invention is the combination therapy of a p38 inhibitor and one or more other anticoagulant or fibrinolytic agents. These include recombinant tissue plasminogen activator (rtPA), streptokinase (SK), urokinase (UK), proUK, heparin, enoxaparin, dalteparin,

20 coumarin anticoagulants, aspirin, dipyrimidamole, aggrenox, ticlopidine, clopidogrel (Plavix), abciximab, RheoPro, integrilin, aggregatostat

and the like. Particular dosages, formulations and methods of administration either alone or combined is within the skill in the art.

25 The Examples which follow serve to illustrate the present invention in more detail without restricting the scope of the invention to the following embodiments by way of example.

Inhibition of P38 MAP Kinase

To determine binding affinities for compounds to p38 MAP kinase, a fluorescence binding

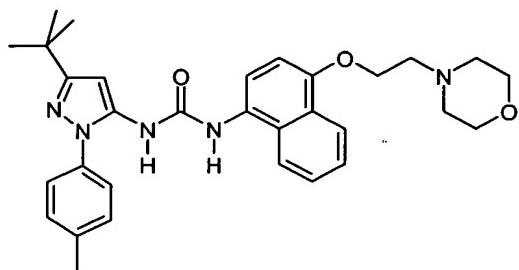
30 assay is used as described [Pargellis,C., Tong,L., Churchill,L., Cirillo,P.F., Gilmore,T., Graham,A.G., Grob,P.M., Hickey,E.R., Moss,N., Pav,S. & Regan,J. Inhibition of p38 MAP

- kinase by utilizing a novel allosteric binding site. *Nature Structural Biology* **9**, 268-272 (2002)]. Binding studies are conducted in aqueous solutions prepared using binding buffer: 20 mM Bis-TRIS Propane (pH 7.0), 2 mM EDTA, 0.01 % NaN₃, and 0.15 % n-octylglucoside. Kinetic data for the association of SK&F 86002 to p38 MAP kinase is collected on a Kintech 5 fluorescence detector system equipped with a stopped flow controller. The data is fit simultaneously to an appropriate equation describing kinetic binding for a simple 1-step binding mechanism [Morelock,M.M., Pargellis,C.A., Graham,E.T., Lamarre,D. & Jung,G. Time-resolved ligand exchange reactions: kinetic models for competitive inhibitors with recombinant human renin. *J. Med. Chem.* **38**, 1751-1761 (1995)]. The exchange curve assays 10 are run as two half reactions using an SLM Aminco Bowman Series 2 Model SQ-340 fluorescence detector. Preliminary equilibrium are set up with two half reactions differing in the order of addition of the two p38 MAP kinase inhibitors. In the first half reaction, p38 MAP kinase and SK&F 86002 are preincubated for 3 minutes. In the second half reaction p38 MAP kinase is preincubated with BIRB 796 for 60 minutes. A net dissociation of the 15 fluorescent probe, SK&F 86002, is observed for the first half reaction and a net association is observed for the second half reaction. The raw data from both half reactions are fitted simultaneously to an equation describing simple competitive inhibition[Morelock,M.M., Pargellis,C.A., Graham,E.T., Lamarre,D. & Jung,G. Time-resolved ligand exchange reactions: kinetic models for competitive inhibitors with recombinant human renin. *J. Med. Chem.* **38**, 20 1751-1761 (1995)]. BIRB 796 (chemical name: 1-(5-*tert*-butyl-2-*p*-tolyl-2*H*-pyrazol-3-yl)-3-[4-(2-morpholin-4-yl-ethoxy)-naphthalen-1-yl]-urea) was synthesized as described [Cirillo,P., Gilmore,T.A., Hickey,E., Regan,J. & Zhang,L.H. Aromatic heterocyclic compounds as antiinflammatory agents. (WO0043384) 12-9-1999].
- 25 Preferred compounds will have an IC₅₀ < 1 uM in this assay, confirming inhibition of p38 MAP Kinase.

Example I, Synthesis of Formula (III)

Formula (III), p38 inhibitor:

5

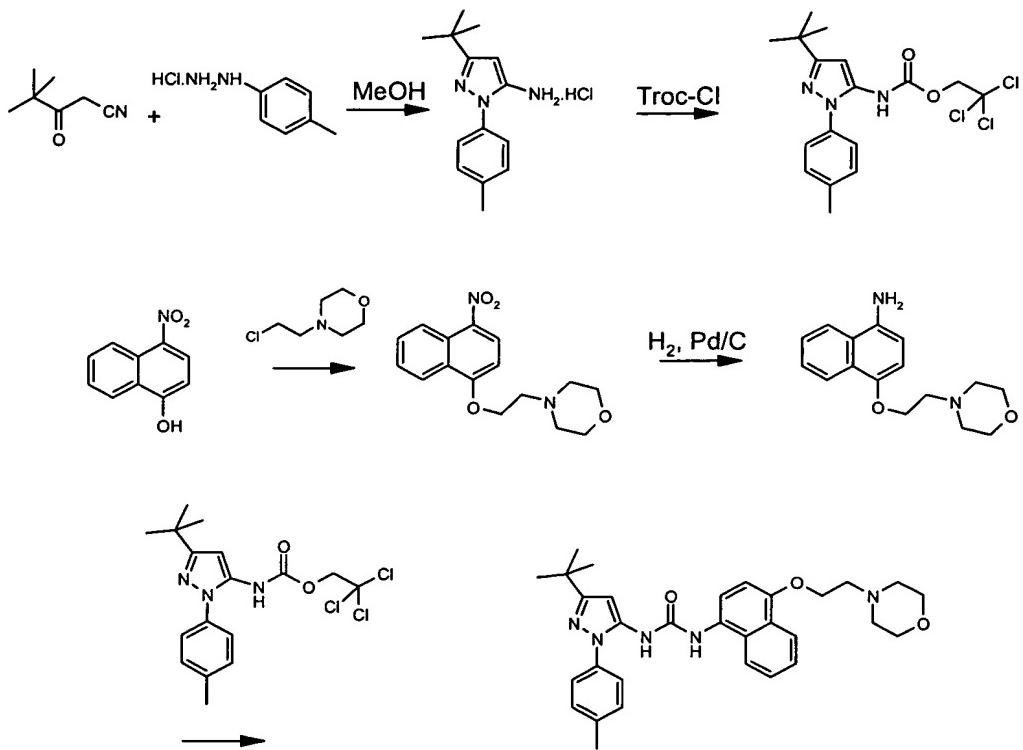


1-[3-tert-butyl-1-p-tolyl-1H-pyrazol-5-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea.

10

All p38 MAP kinase inhibitors described herein may be prepared by the methods found in the citations provided herein and by methods known in the art. Formula (III) may be obtained as described in US patent no. 6,319,921 or US application serial no. 09/611,109.

15



- 5-Amino-3-*t*-butyl-1-*p*-tolylpyrazole hydrochloride:** A solution of pivaloylacetonitrile (750 g, 6.0 mol) and *p*-tolylhydrazine hydrochloride (660 g, 4.2 mol) in methanol (2.8 L) was refluxed for 3 h. Heptane was added, and methanol was removed by distillation. The product was crystallized from the solution, collected by filtration and dried in vacuum oven to constant weight. Yield: 1.05 kg, 94%. ^1H NMR (CDCl_3) 7.50 (d, 2H), 7.30 (d, 2H), 5.60 (s, 1H), 2.45 (s, 3H), 1.40 (s, 9H). MS (CI) m/z 229 ($\text{M}^+ + \text{H}$).
- 10 5-(2,2,2-Trichloroethoxycarbonyl)amino-3-*t*-butyl-1-*p*-tolylpyrazole:** A mixture of 5-amino-3-*t*-butyl-1-*p*-tolylpyrazole hydrochloride (300 g, 1.13 mol), water (0.9 L), EtOAc (2.1 L) and NaOH (117 g, 2.84 mol) was stirred between 5 – 15 $^\circ\text{C}$ for 30 min. To this mixture, 2,2,2-trichloroethyl chloroformate (342 g, 1.58 mol) was added over 1 h between 5 – 15 $^\circ\text{C}$. The mixture was stirred at room temperature for 2 h, and then the aqueous layer was separated from the EtOAc layer. The EtOAc layer was washed with brine (2 x 0.9 L) and dried over MgSO_4 (60 g). The EtOAc layer was collected by filtration. To this solution, heptane was added. A part of the solution was removed by distillation. The product was crystallized from the solution, collected by filtration and dried in vacuum oven to constant weight. Yield: 409

g, 90%. ^1H NMR (CDCl_3) 7.40 (d, 2H), 7.30 (d, 2H), 6.40 (s, 1H), 4.80 (s, 2H), 2.40 (s, 3H), 1.40 (s, 9H). MS (EI) m/z 404 (M^+).

4-Nitro-1-(2-morpholinethoxy)naphthalene: A mixture of 4-nitro-1-hydroxynaphthalene (194 g, 1.0 mol), 4-(2-chloroethyl)morpholine hydrochloride (264 g, 1.4 mol), NaOH (58 g, 1.4 mol), K_2CO_3 (339 g, 2.4 mol) and 1-methyl-2-pyrrolidinone (1.0 L) was heated to $90 - 100^\circ\text{C}$ and held for 1 – 2 h. The mixture was cooled to 40°C and water was slowly added. The mixture was cooled to 5°C and held for 4 h. The product was collected by filtration, washed with water, cyclohexane and dried in vacuum to constant weight. Yield: 227 g, 75%. ^1H NMR (CDCl_3) δ 8.76 (d, 1H), 8.38 (m, 2H), 7.74 (dd, 1H), 7.58 (dd, 1 H), 6.79 (d, 1 H), 4.38 (dd, 2 H), 3.74 (d, 4 H), 2.98 (dd, 2H), 2.65 (d, 4 H). MS (EI) m/z 303 ($\text{M} + 1$).

4-Amino-1-(2-morpholinethoxy)naphthalene hydrochloride: A mixture of 4-nitro-1-(2-morpholinethoxy)naphthalene (40 g, 0.13 mol), MeOH (280 mL) and Pd/C (50% water, 1.2 g) was hydrogenated under 30 psi for 24 h. The catalyst was filtered through a layer of diatomaceous earth under nitrogen. To this filtrate 20 mL of HCl (37%) and cyclohexane (200 mL) were added. The solvent was removed under reduced pressure and the product collected by filtration. The product was dried in vacuum to constant weight. Yield: 33 g, 82%. ^1H NMR (DMSO) δ 8.38 (d, 1H), 8.00 (d, 1H), 7.72 (dd, 1H), 7.64 (m, 2H), 7.05 (d, 1H), 4.62 (s, 2H), 4.00 (b, 4H), 3.88 (s, 2H), 3.40 (b, 4H). MS (EI) m/z 273 (M^+).

1-[3-tert-butyl-1-p-tolyl-1H-pyrazol-5-yl]-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]-urea: A solution of 5-(2,2,2-trichloroethoxycarbonyl)amino-3-*t*-butyl-1-*p*-tolylpyrazole (10.6 g, 26 mmol), 4-amino-1-(2-morpholinethoxy)naphthalene (free base from HCl salt above, 7.16 g, 26 mmol), diisopropylethylamine (3.2 g, 25 mmol) and DMSO (75 mL) was heated to $55 - 60^\circ\text{C}$ and held for 1.5 h. To this solution, ethyl acetate (100 mL) was added. The organic layer was washed with brine (4x50 mL), and dried over MgSO_4 . The solvent was removed under reduced pressure, and residue was crystallized from acetonitrile (50 mL) at 0°C . The product was collected by filtration, recrystallized from isopropanol and dried in vacuum to constant weight, m.p.: $151-152^\circ\text{C}$. Yield: 11.4g, 87%. ^1H NMR (DMSO) δ 8.75 (s, 1H), 8.51 (s, 1H), 8.21 (d, 1H), 7.85 (d, 1H), 7.65 (d, 1H), 7.55 (m, 2H), 7.49 (dd, 1H),

7.35 (dd, 1H), 6.95 (d, 1H), 6.38 (s, 1H), 4.26 (dd, 2H), 3.60 (dd, 4H), 2.81 (dd, 2H), 2.55 (dd, 4H), 2.38 (s, 3H), 1.29 (s, 9H). MS (CI) m/z 528 (M^++1).

Example II: LPS Study

5

This study was performed as a randomized, double-blind, placebo-controlled experiment and was performed simultaneously with a study examining the effect of formula (III) on LPS-induced cytokine release and neutrophil activation ¹⁴.

Briefly, LPS (from *E.coli*, lot G; United States Pharmacopeial Convention, Rockville, MD; 4 ng/kg body weight) was administered as

10 a bolus intravenous injection to 24 healthy male volunteers (mean age 22 years, range 19-29).

Three hours prior to infusion of LPS, the p38 MAPK inhibitor (III) (600 mg n=8, 50 mg n=8) or placebo (n=8) was administered orally. Blood samples were obtained before administration of (III) or placebo (t = -3 h), directly before LPS administration (t = 0 h), and at several time points up to 24 hours thereafter.

15

Assays

Blood was collected in siliconized vacutainer tubes (Becton Dickinson, Plymouth, England) containing 0.105 M sodium citrate in a 1:9 (v/v) anticoagulant:blood ratio. ELISA's were

20 performed according to the instructions of the manufacturers: prothrombin fragment F1+2 (Dade Behring, Marburg GmbH, Germany), tissue-type plasminogen activator (tPA)(Asserachrom tPA, Diagnostic Stago, Asnieres-sur-Seine, France), plasminogen

activator inhibitor type 1 (PAI-1) (Monozyme, Charlottelund, Denmark), Von Willebrand Factor (vWF) (Dakopatts, Ävlsjö, Sweden), and soluble E-selectin (sE-selectin)(Diacclone, Besancon Cedex, France); plasmin- \square 2-antiplasmin complexes (PAPc) were determined by a

25 radio immunoassay as described elsewhere ¹⁵.

Sepsis - Animal Models

30 Numerous animal models have been developed in which to simulate the clinical manifestation of septic shock in an attempt to gain further understanding of the disease state and to evaluate possible therapeutic agents. Smaller animal models such as mouse, rats and rabbits afford the

investigator the advantages of a screening tool whereby results may be generated faster since larger numbers of animals can be used at one time, however, the disadvantages are that these species have reduced capacity for extensive biochemical analysis (smaller blood volume), show a higher tolerance for bacterial endotoxin (a highly antigenic portion of gram negative bacteria) and are more difficult to instrument when monitoring cardiovascular parameters.

Thus, larger animal models are preferred when studying the cardiovascular response to sepsis. Specifically, primate models are described whereby continuous infusion live *E. coli* or endotoxin is used to simulate the human disease. It has been reported that intravenous administration of *E. coli* or endotoxin can result in systemic hypotension, decreased cardiac output, decreased vascular resistance, pulmonary hypertension, diminished lung compliance, leukopenia and thrombocytopenia. In addition, cardiovascular response, blood flow, leukocyte function and blood coagulation have been studied in primates.

15 Animal Models - Venous Thrombosis

Numerous models have also been developed to study thrombosis in animals. Rabbit or rat model of venous or arterial thrombosis are known in the literature. Two typical models are:

- Rabbit deep vein thrombosis model: Briefly, a non-occlusive fibrin-rich thrombus is formed
20 on a thrombogenic surface (cotton threads attached to copper wire) introduced into the abdominal vena cava via the femoral vein of an anesthetized rabbit.
- Rabbit/rat/dog arteriovenous shunt model: Briefly, the left femoral artery and vein is isolated, cannulated with polyethylene tubing and connected with a polyethylene shunt containing a 6-cm long cotton thread. The cotton thread is removed 15 min after blood begins to circulate
25 through the shunt, and the thrombus-coated thread is weighed.

All references and patent publications cited in this application are incorporated by reference herein in their entirety.

30 **References**

1. Levi M, Ten Cate H. Disseminated intravascular coagulation. *N Engl J Med.* 1999;341:586-592.
2. Van der Poll T, van Deventer SJH. Endotoxemia in healthy subjects as a human model of inflammation. In: Cohen J, Marshall J, ed. *The Immune Response in the Critically Ill*. Berlin: Springer-Verlag; 1999:335-357.
3. de Jonge E, Dekkers PE, Creasey AA, Hack CE, Paulson SK, Karim A, Kesecioglu J, Levi M, van Deventer SJ, van Der Poll T. Tissue factor pathway inhibitor dose-dependently inhibits coagulation activation without influencing the fibrinolytic and cytokine response during human endotoxemia. *Blood.* 2000;95:1124-1129.
- 10 4. Creasey AA, Chang AC, Feigen L, Wun TC, Taylor FB, Jr., Hinshaw LB. Tissue factor pathway inhibitor reduces mortality from Escherichia coli septic shock. *J Clin Invest.* 1993;91:2850-2856.
5. Carr C, Bild GS, Chang AC, Peer GT, Palmier MO, Frazier RB, Gustafson ME, Wun TC, Creasey AA, Hinshaw LB, et al. Recombinant *E. coli*-derived tissue factor pathway 15 inhibitor reduces coagulopathic and lethal effects in the baboon gram-negative model of septic shock. *Circ Shock.* 1994;44:126-137.
6. Levi M, ten Cate H, Bauer KA, van der Poll T, Edgington TS, Buller HR, van Deventer SJ, Hack CE, ten Cate JW, Rosenberg RD. Inhibition of endotoxin-induced activation of coagulation and fibrinolysis by pentoxifylline or by a monoclonal anti-tissue 20 factor antibody in chimpanzees. *J Clin Invest.* 1994;93:114-120.
7. Herlaar E, Brown Z. p38 MAPK signalling cascades in inflammatory disease. *Mol Med Today.* 1999;5:439-447.
8. Ono K, Han J. The p38 signal transduction pathway: activation and function. *Cell Signal.* 2000;12:1-13.
- 25 9. Chu AJ, Wang ZG, Walton MA, Seto A. Involvement of MAPK activation in bacterial endotoxin-inducible tissue factor upregulation in human monocytic THP-1 cells. *J Surg Res.* 2001;101:85-90.
10. Blum S, Issbrucker K, Willuweit A, Hehlgans S, Lucerna M, Mechtcheriakova D, Walsh K, von der Ahe D, Hofer E, Clauss M. An inhibitory role of the phosphatidylinositol 3-30 kinase-signaling pathway in vascular endothelial growth factor-induced tissue factor expression. *J Biol Chem.* 2001;276:33428-33434.

11. Eto M, Kozai T, Cosentino F, Joch H, Luscher TF. Statin prevents tissue factor expression in human endothelial cells: role of Rho/Rho-kinase and Akt pathways. *Circulation*. 2002;105:1756-1759.
12. Herkert O, Diebold I, Brandes RP, Hess J, Busse R, Gorlach A. NADPH oxidase mediates tissue factor-dependent surface procoagulant activity by thrombin in human vascular smooth muscle cells. *Circulation*. 2002;105:2030-2036.
13. Pargellis C, Tong L, Churchill L, Cirillo PF, Gilmore T, Graham AG, Grob PM, Hickey ER, Moss N, Pav S, Regan J. Inhibition of p38 MAP kinase by utilizing a novel allosteric binding site. *Nat Struct Biol*. 2002;9:268-272.
14. Branger J, van Den Blink B, Weijer S, Madwed J, Bos CL, Gupta A, Yong CL, Polmar SH, Olszyna DP, Hack CE, van Deventer SJ, Peppelenbosch MP, van der Poll T. Anti-inflammatory effects of a p38 mitogen-activated protein kinase inhibitor during human endotoxemia. *J Immunol*. 2002;168:4070-4077.
15. Levi M, de Boer JP, Roem D, ten Cate JW, Hack CE. Plasminogen activation in vivo upon intravenous infusion of DDAVP. Quantitative assessment of plasmin-alpha 2-antiplasmin complex with a novel monoclonal antibody based radioimmunoassay. *Thromb Haemost*. 1992;67:111-116.
16. van der Poll T, Levi M, Hack CE, ten Cate H, van Deventer SJ, Eerenberg AJ, de Groot ER, Jansen J, Gallati H, Buller HR, et al. Elimination of interleukin 6 attenuates coagulation activation in experimental endotoxemia in chimpanzees. *J Exp Med*. 1994;179:1253-1259.
17. Uchiyama T, Kurabayashi M, Ohyama Y, Utsugi T, Akuzawa N, Sato M, Tomono S, Kawazu S, Nagai R. Hypoxia induces transcription of the plasminogen activator inhibitor-1 gene through genistein-sensitive tyrosine kinase pathways in vascular endothelial cells. *Arterioscler Thromb Vasc Biol*. 2000;20:1155-1161.
18. van der Poll T, Coyle SM, Levi M, Jansen PM, Dentener M, Barbosa K, Buurman WA, Hack CE, ten Cate JW, Agosti JM, Lowry SF. Effect of a recombinant dimeric tumor necrosis factor receptor on inflammatory responses to intravenous endotoxin in normal humans. *Blood*. 1997;89:3727-3734.
19. DeLa Cadena RA, Majluf-Cruz A, Stadnicki A, Tropea M, Reda D, Agosti JM, Colman RW, Suffredini AF. Recombinant tumor necrosis factor receptor p75 fusion protein

(TNFR:Fc) alters endotoxin-induced activation of the kinin, fibrinolytic, and coagulation systems in normal humans. *Thromb Haemost.* 1998;80:114-118.

20. Verbon A, Dekkers PE, ten Hove T, Hack CE, Pribble JP, Turner T, Souza S, Axtelle T, Hoek FJ, van Deventer SJ, van der Poll T. IC14, an anti-CD14 antibody, inhibits 5 endotoxin-mediated symptoms and inflammatory responses in humans. *J Immunol.* 2001;166:3599-3605.
21. Marin V, Farnarier C, Gres S, Kaplanski S, Su MS, Dinarello CA, Kaplanski G. The p38 mitogen-activated protein kinase pathway plays a critical role in thrombin-induced endothelial chemokine production and leukocyte recruitment. *Blood.* 2001;98:667-673.
- 10 22. Read MA, Whitley MZ, Gupta S, Pierce JW, Best J, Davis RJ, Collins T. Tumor necrosis factor alpha-induced E-selectin expression is activated by the nuclear factor-kappaB and c-JUN N-terminal kinase/p38 mitogen- activated protein kinase pathways. *J Biol Chem.* 1997;272:2753-2761.
- 15 23. Jersmann HP, Hii CS, Ferrante JV, Ferrante A. Bacterial lipopolysaccharide and tumor necrosis factor alpha synergistically increase expression of human endothelial adhesion molecules through activation of NF-kappaB and p38 mitogen-activated protein kinase signaling pathways. *Infect Immun.* 2001;69:1273-1279.
- 20 24. Fijen JW, Zijlstra JG, De Boer P, Spanjersberg R, Cohen Tervaert JW, Van Der Werf TS, Ligtenberg JJ, Tulleken JE. Suppression of the clinical and cytokine response to endotoxin by RWJ- 67657, a p38 mitogen-activated protein-kinase inhibitor, in healthy human volunteers. *Clin Exp Immunol.* 2001;124:16-20.